THE NEW AMERICAN MOTORCYCLE™

2008

VEGAS® • VEGAS LOW™ • VEGAS 8-BALL™

KINGPIN® • KINGPIN® TOUR • KINGPIN 8-BALL™

SERVICE MANUAL PN 9921242

FOREWORD

This manual is designed primarily for use by Victory service technicians in a properly equipped shop and should be kept available for reference in the shop area. All references to left and right side of the motorcycle are from the operator's perspective when seated in a normal riding position.

Some procedures outlined in this manual require a sound knowledge of mechanical theory, tool use, and shop procedures in order to perform the work safely and correctly. Read the text and be familiar with the service procedures before starting the work. Certain procedures will require the use of special tools. Use only the proper tools as specified. If you have any doubt as to your ability to perform any of the procedures outlined in this service manual, contact an authorized Victory dealer for service.

This manual includes procedures for maintenance, component identification and repair, along with service specifications for the above model motorcycles. Comments or suggestions about this manual may be directed to: Service Publications Dept. @ Polaris Sales Inc. 2100 Hwy 55 Medina Minnesota 55340.

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1

CHAPTER 1
GENERAL INFORMATION / ROUTING

GENERAL INFORMATION 1.3
SERVICE RULES 1.3
SAFETY INFORMATION 1.4
UNDERSTANDING SAFETY LABELS & INSTRUCTIONS 1.4
GENERAL SPECIFICATIONS - VEGAS 1.5
VEGAS SPECIFICATIONS 1.5
VEGAS SPECIFICATIONS (CONT.) 1.6
GENERAL SPECIFICATIONS-KINGPIN 1.7
KINGPIN SPECIFICATIONS 1.7
KINGPIN SPECIFICATIONS (CONT.) 1.8
VEHICLE LOADING 1.9
WEIGHT CAPACITY - TOP BOX AND SADDLEBAGS 1.9
LOADING EXAMPLES FOR GROSS VEHICLE WEIGHT RATING (GVWR) - VEGAS . 1.9
LOADING EXAMPLES FOR GROSS VEHICLE WEIGHT RATING (GVWR) - KINGPIN 1.10
REFINISHING 1.11
VICTORY TOUCH-UP AND REFINISHING PAINT 1.11
VICTORY DETAIL AND FINISH RESTORER KITS 1.11
PAINTING TERMS 1.11
PAINT COLORS BY MODEL 1.12
PAINT COLOR CODES 1.14
VEHICLE INFORMATION 1.15
VEHICLE IDENTIFICATION NUMBER (VIN) 1.15
MODEL NUMBER 1.15
VIN NUMBER LOCATION 1.16
MANUFACTURER LABEL 1.16
ENGINE NUMBER LOCATION 1.16
KEY IDENTIFICATION NUMBER 1.16
PUBLICATIONS & TECHNICAL LITERATURE 1.17
PUBLICATION PART NUMBERS 1.17
MATERIAL SAFETY DATA SHEET (MSDS) 1.17
BREAK IN PERIOD 1.18
BREAK-IN PROCEDURE 1.18
EMISSIONS 1.19
EMISSION CONTROL SYSTEMS 1.19
EMISSION SOURCES 1.19
EXHAUST EMISSION CONTROL 1.19
NOISE EMISSION CONTROL SYSTEM 1.19
CRANKCASE EMISSION CONTROL 1.19
EVAPORATIVE EMISSION CONTROL (CALIFORNIA MODELS) 1.19
INSTRUMENTS 1.20
SPEEDOMETER 1.20
TACHOMETER 1.20
ODOMETER 1.20
TRIP ODOMETER 1.20
INDICATOR LIGHTS 1.21

SPECIAL SERVICE TOOLS 1.22
GENERAL & PRECISION MEASUREMENT 1.22
TUNE UP & MAINTENANCE 1.22
ELECTRICAL 1.22
ENGINE, CLUTCH, & TRANSMISSION 1.23
STEERING & SUSPENSION 1.23
WHEEL & TIRE 1.24
FUEL SYSTEM & FUEL INJECTION 1.24
TOOL ORDERING INFORMATION 1.24
TRANSPORTING AND SECURING THE MOTORCYCLE 1.25
GUIDELINES 1.25
ROUTING DIAGRAMS 1.26
WIRE HARNESS - RIGHT REAR FRAME 1.26
WIRE HARNESS - RIGHT SIDE 1.27
WIRE HARNESS - LEFT SIDE 1.28
WIRE HARNESS - UNDER SEAT 1.29
WIRE HARNESS CONNECTOR LOCATIONS 1.30
WIRE HARNESS FRONT VIEW 1.30
WIRE HARNESS RIGHT SIDE VIEW / TOP VIEW 1.31
REFERENCE 1.32
SAE TAP DRILL SIZES 1.32
METRIC TAP DRILL SIZES 1.32
DECIMAL EQUIVALENTS 1.32
FAHRENHEIT TO CELSIUS 1.33
MEASUREMENT CONVERSION CHART 1.33

GENERAL INFORMATION

SERVICE RULES

In order to perform service work efficiently and prevent costly errors, technicians should read the text in this manual and familiarize themselves with the procedures before beginning. Notes, Cautions and Warnings have been included for clarification of text and safety concerns. Knowledge of mechanical theory, tool use and shop procedures are necessary to perform some procedures in this manual safely and correctly.

Use only genuine Victory service parts, including fasteners that require replacement if removed. Do NOT substitute fasteners or hardware.

Cleanliness of parts and tools as well as the work area is of primary importance. Dirt and foreign matter will cause damage to precision parts. Clean the motorcycle before beginning service. Clean all parts before installing.

If difficulty is encountered in removing or installing a component, look to see if a cause for the difficulty can be found. If it is necessary to tap the part into place, use a soft face hammer and tap lightly.

Always follow torque specifications as outlined throughout this manual. Incorrect torquing may lead to serious machine damage or in the case of steering, driveline, and chassis components, can result in loss of control during operation of the motorcycle, which may result in severe personal injury or death.

If a torquing sequence is indicated for nuts, bolts or screws of a certain component, start all fasteners and hand tighten. Following the method and sequence indicated, tighten evenly to the specified torque value. When removing nuts, bolts or screws from a component with several fasteners, loosen them all about 1/4 turn before removing them to prevent distortion of that component.

Replace all oil seals, sealing washers, gaskets, and O-rings with new ones during assembly. Be sure the mating surfaces for the gasket are clean and smooth to avoid leaks and maintain specified tolerances.

Some procedures require removal of retaining rings or clips. Removal can weaken and deform these parts, therefore, they should always be replaced with new parts. When installing new retaining rings and clips, use care not to expand or compress them beyond what is required for installation.

Victory lubricants and greases have been specially formulated to provide maximum performance and protection when applied properly. In some applications, warranty coverage may be void if improper lubricants are used.

Parts requiring grease should be cleaned thoroughly and fresh grease applied before reassembly. Deteriorating grease loses lubricity and may contain abrasive foreign matter.

Always replace locking hardware such as lock nuts or lock washers, fasteners that have pre-applied locking agent, or any other fasteners as noted in this service manual with genuine Victory hardware from an authorized Victory dealer.

Working with batteries can be hazardous. Review all battery warnings and cautions. See “BATTERY SAFETY” on page 16.2.

SAFETY INFORMATION

Understanding Safety Labels & Instructions

READ AND BECOME FAMILIAR WITH ALL WARNING AND CAUTION SYSMBOLS AND STATEMENTS LISTED BELOW AND IN THE TEXT OF THIS MANUAL BEFORE YOU BEGIN WORK.

This is the safety alert symbol. When you see this symbol on the vehicle or in this manual, be alert to the potential for personal injury. Your safety is involved!

⚠WARNING

Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

⚠CAUTION

Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE:

Indicates a situation, which, if not avoided, could result in damage to the motorcycle.

⚠WARNING

Gasoline is extremely flammable and explosive under certain conditions.

- Always stop the engine and refuel outdoors or in a well ventilated area.
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.
- Do not overfill the tank. Do not fill the tank neck above the fuel tank insert. Leave air space to allow for fuel expansion.
- If you get gasoline in your eyes or if you swallow gasoline, see your doctor immediately. Never try to syphon gasoline using mouth suction.
- If you spill gasoline on your skin or clothing, immediately wash it off with soap and water and change clothing.
- Never start the engine or let it run in an enclosed area. Engine exhaust fumes are poisonous and can cause loss of consciousness or death in a short time.

⚠WARNING

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

⚠WARNING

Improper repairs or service can create unsafe conditions that may cause severe personal injury or death.

⚠WARNING

The engine and exhaust components on this product become very hot during operation and remain so for a period of time after the engine is stopped.

⚠WARNING

Never run the engine in an enclosed area without a properly functioning exhaust gas evacuation system connected to the product.

⚠WARNING

Modifications to this motorcycle not approved by Victory may cause loss of performance, excessive emissions, and make the machine unsafe for use.

⚠WARNING

Brake fluid is poisonous.

KEEP OUT OF REACH OF CHILDREN.

⚠WARNING

Wear insulated protection for hands and arms or wait until hot components have cooled sufficiently before working on the product.

⚠WARNING

Brake fluid is poisonous. Do not ingest or allow brake fluid to contact eyes. Always wear eye protection when working with brake fluid.

⚠WARNING

Battery electrolyte is poisonous. It contains sulfuric acid. Serious burns can result from contact with skin, eyes or clothing.

⚠WARNING

Care should be taken to be sure the motorcycle will not tip or fall while elevated. Severe personal injury or death could occur if the motorcycle tips or falls.

NOTICE

Brake fluid will damage plastic, painted and rubber parts. Protect these surfaces whenever the brake system is being serviced.

GENERAL SPECIFICATIONS - VEGAS

Vegas Specifications

		2008 Vegas [Vegas 8-Ball]	2008 Vegas Low
CAPACITIES & DIMENSIONS	Oil Capacity	5.0 Qt (4.75 ltr) (Approximately 4.65 qts.or 4.25 ltr at oil & filter change)	
	Fuel Capacity	4.5 US Gal (17 ltr) (.8 U.S. gal / 3.0 ltr reserve)	
	Fuel Type / Octane Minimum	Premium Unleaded / 92 Octane	
	Wheelbase	66.3 in (168.4 cm)	
	Dry Weight	658 lbs (298 kg) [652 lbs (296 kg)]	651 lbs (295 kg)
	Wet Weight	686 lbs (311 kg) [680 lbs (308.4 kg)]	679 lbs (308 kg)
	Gross Vehicle Weight Rating	1151 lbs. (522 kg)	1134 lbs. (514 kg)
	Maximum Load Capacity*	465 lbs. (211 kg) [465 lbs. (211 kg)]	455 lbs. (206 kg)
	Overall Length	96.0 in (243.9 cm)	
	Overall Width	38 in (97 cm)	38 in (97 cm)
	Overall Height	49.40 in (125.4 cm)	49.40 in (125.4 cm)
	Seat Height	26.5 in (67.3 cm)	25.2 in (64.0 cm)
	Ground Clearance	5.8 in (14.8 cm)	5.3 in (13.5 cm)
	Passenger Capacity	1 [8-Ball - 0]	0
	Rake / Trail	32.9 Degrees / 4.9 in. (12.6 cm)	
ENGINE	Engine Type	Freedom® 100/6 V-Twin [8-Ball 100 / 5]	Freedom® 100/6 V-Twin
	Engine Configuration	50^{o} SOHC Transverse V-Twin 4 Stroke	
	Engine Displacement	1634cc / 100 cubic	
	Engine Cooling System	Air / Oil	
	Compression Ratio	8.7:1	
	Compression Pressure	185 - 225 psi (1275 - 1551 kPa)	
	Valves Train	4 Valves per cylinder. Hydraulic Lifters & Cam Chain Adjusters (No Adjustment)	
	Bore x Stroke	101 x 102 mm	
	Starter	Electric / Direct Drive	
	Fuel System / Throttle Body	Electronic Fuel Injection / 45 mm	
	Exhaust System Type	Dual - Large bore slash cut with common volume	
	Lubrication System	Wet Sump	
	Spark Plug Type (Gap)	NGK DCPR6E (.032-.036 in. / 0.8-.9 mm)	
	Dry Weight (Engine)	265 lbs. (120 Kg)	
BRAKE	Brake Type (Front / Rear)	Disc / Disc	
	Front Brake	Single 300 x 5 mm Floating Disc with 4 Piston Caliper	
	Rear Brake	Single 300 x 5 mm Floating Disc with 2 Piston Caliper	

All specifications are for standard Victory Vegas, Vegas 8-Ball, and Vegas Low models. Specifications may change with the addition of custom order options and / or accessories. Polaris Sales Inc. reserves the right without prior notice to discontinue at any time at its discretion any of the items herein or change specifications or designs without incurring any obligation to the customer.

* Maximum load capacity includes the weight of all additional accessories, options, cargo, rider with riding gear, and passenger with riding gear. See GVWR and Vehicle Loading information beginning on page 1.9.

Vegas Specifications (cont.)

		2008 Vegas [Vegas 8-Ball]	2008 Vegas Low
DRIVE SYSTEM	Transmission Type	Manual, 6 Speed Overdrive Constant Mesh [8-Ball - 5 speed]	
	Clutch Type	Wet, Multi-Plate Diaphragm Spring	
	Primary Drive Type	Wet, Gear Drive w/ Torque Compensator	
	Primary Reduction Ratio	1.5:1	
	Final Drive Type / Final Drive Ratio	28mm Carbon Fiber Reinforced Belt / 2.12:1	
	Gear Shift Pattern	1 Down, 5 Up [8-Ball 1 Down, 4 Up]	1 Down, 5 Up
	Internal Gear Ratios 1st	3.15:1	
	2nd	2.03:1	
	3rd	1.53:1	
	4th	1.24:1	
	5th	1:1	
	6th	.84:1 [8-Ball N/A]	
TIRES	Front Wheel (Size / Type)	Cast or Billet / 2.15 x 21(inch)	
	Rear Wheel (Size / Type)	Cast or Billet 5.0 x 18 (inch)	
	Front Tire	Dunlop Elite 3 (90/90 21 Tubeless)	
	Rear Tire	Dunlop D417 (180/55-B18 Tubeless)	
	Minimum Tread Depth	.063 in. (1.6mm)	
SUSPENSION	Front Type	43mm Conventional Telescopic Fork	
	Front Travel	5.1 in. (130 mm)	
	Front Tube Diameter	43 mm (1.7 in.)	
	Rear Shock Type	Single, Monotube Gas w/Adjustable Preload	
	Rear Swingarm Type	Forged and Cast Aluminum with Rising Rate Linkage	
	Rear Travel (inches)	3.9 in (100 mm)	3.0 in (75 mm)
LIGHTS	Headlamp (Intl)	High: H-7 55W Low: H-11 35W (International - H4)	
	Brake / Tail Light	Non-Serviceable LED	
	Turn Signal Light	R10W (10W)	
	Instrument Cluster	Indicator Lights: W2.3W (2.3 Watt Wedge Base) Backlighting: T10 (1.7 Watt) Tach: T6.5 (1.7 Watt)	
	Alternator / Battery	38 amp (Approx 450 Watts) / 12V 18AH 320 CCA	
FUSES	Brake / Headlamp	15 amp fuse	
	Tail Lamp / Flashers / Indicator Lamps / Horn	Auto Cancel Turn Signal System - 15 amp fuse	
	Engine / PCM	15 amp fuse	
	Ignition / Gauges	15 amp fuse	
	Fuel Pump	10 amp fuse	
	Accessory	15 amp fuse	
	Main Circuit Breaker	40 amp circuit breaker	

All specifications are for standard Victory Vegas, Vegas 8-Ball, and Vegas Low models. Specifications may change with the addition of custom order options and / or accessories. Polaris Sales Inc. reserves the right without prior notice to discontinue at any time at its discretion any of the items herein or change specifications or designs without incurring any obligation to the customer.

GENERAL SPECIFICATIONS-KINGPIN

Kingpin Specifications

		2008 Kingpin [Kingpin 8-Ball]	2008 Kingpin Tour
CAPACITIES &- DIMENSIONS	Oil Capacity	5.0 Qt (4.75 ltr) (Approximately 4.65 qts.or 4.25 ltr at oil & filter change)	
	Fuel Capacity	4.5 US Gal (17 ltr) (.8 U.S. gal / 3.0 ltr reserve)	
	Fuel Type / Octane Minimum	Premium Unleaded / 92 Octane	
	Wheelbase	65.6 in (166.6 cm)	
	Dry Weight	676 lbs (307 kg) [670 lbs (304 kg)]	741 lbs (336 kg)
	Wet Weight	704 lbs (319 kg) [698 lbs (317 kg)]	769 lbs (349 kg)
	Gross Vehicle Weight Rating	1234 lbs. (560 kg)	
	Maximum Load Capacity*	530 lbs (240 kg) [536 lbs (243 kg)]	465 lbs (211 kg)
	Overall Length	99.9 in (253.7 cm)	102.9 in (261.4 cm)
	Overall Width	38 in (97 cm)	38 in (97 cm)
	Overall Height	49.40 in (125.4 cm)	56.30 in (143 cm)
	Seat Height	26.5 in (67.3 cm)	
	Ground Clearance	5.8 in (14.8 cm)	
	Passenger Capacity	1 [8-Ball - 0]	1
	Rake / Trail	32.8 Degrees / 5.4 in. (13.8 cm)	
ENGINE	Engine Type	Freedom® 100/6 V-Twin [8-Ball 100 / 5]	Freedom® 100/6 V-Twin
	Engine Configuration	50^{o} SOHC Transverse V-Twin 4 Stroke	
	Engine Displacement	1634cc / 100 cubic	
	Engine Cooling System	Air / Oil	
	Compression Ratio	8.7:1	
	Compression Pressure	185 - 225 psi (1275 - 1551 kPa)	
	Valves Train	4 Valves per cylinder. Hydraulic Lifters & Cam Chain Adjusters (No Adjustment)	
	Bore x Stroke	101 x 102 mm	
	Starter	Electric / Direct Drive	
	Fuel System / Throttle Body	Electronic Fuel Injection / 45 mm	
	Exhaust System Type	Dual - Large bore slash cut with common volume	
	Lubrication System	Wet Sump	
	Spark Plug Type (Gap)	NGK DCPR6E (.032-.036 in. / 0.8-.9 mm)	
	Dry Weight (Engine)	265 lbs. (120 Kg)	
BRAKES	Brake Type (Front / Rear)	Disc / Disc	
	Front Brake	Single 300 x 5 mm Floating Disc/4 P Caliper	Dual 300 x 5 mm Floating Disc/4 P Caliper
	Rear Brake	Single 300 x 5 mm Floating Disc with 2 Piston Caliper	

All specifications are for standard Victory Kingpin, Kingpin 8-Ball, and Kingpin Tour models. Specifications may change with the addition of custom order options and / or accessories. Polaris Sales Inc. reserves the right without prior notice to discontinue at any time at its discretion any of the items herein or change specifications or designs without incurring any obligation to the customer.

* Maximum load capacity includes the weight of all additional accessories, options, cargo, rider with riding gear, and passenger with riding gear. See GVWR and Vehicle Loading information beginning on page 1.9.

Kingpin Specifications (cont.)

		2008 Kingpin [Kingpin 8-Ball]	2008 Kingpin Tour
DRIVE SYSTEM	Transmission Type	Manual, 6 Speed Overdrive Constant Mesh [8-Ball - 5 speed]	
	Clutch Type	Wet, Multi-Plate Diaphragm Spring	
	Primary Drive Type	Wet, Gear Drive w/ Torque Compensator	
	Primary Reduction Ratio	1.5:1	
	Final Drive Type / Final Drive Ratio	28mm Carbon Fiber Reinforced Belt / 2.12:1	
	Gear Shift Pattern	1 Down, 5 Up [8-Ball 1 Down, 4 Up]	1 Down, 5 Up
	Internal Gear Ratios 1st	3.15:1	
	2nd	2.03:1	
	3rd	1.53:1	
	4th	1.24:1	
	5th	1:1	
	6th	.84:1 [8-Ball N/A]	
TIRES	Front Wheel (Size / Type)	Cast or Billet / 3.0 x 18 (inch)	
	Rear Wheel (Size / Type)	Cast or Billet 5.0 x 18 (inch)	
	Front Tire	Dunlop 491 Elite ll (130/70 B 18 Tubeless)	
	Rear Tire	Dunlop D417 (180/55-B18 Tubeless)	
	Minimum Tread Depth	.063 in. (1.6mm)	
SUSPENSION	Front Type	43mm Inverted Cartridge Telescopic Fork	
	Front Travel	5.1 in. (130 mm)	
	Front Tube Diameter	43 mm (1.7 in.)	
	Rear Shock Type	Single, Monotube Gas w/Adjustable Preload	
	Rear Swingarm Type	Forged and Cast Aluminum with Rising Rate Linkage	
	Rear Travel (inches)	3.9 in (100 mm)	
LIGHTS	Headlamp (Intl)	High: H-7 55W Low: H-11 35W (International - H4)	
	Brake / Tail Light	Non-Serviceable LED	
	Turn Signal Light	R10W (10W)	
	Instrument Cluster	Indicator Lights: W2.3W (2.3 Watt Wedge Base) Backlighting: T10 (1.7 Watt) Tach: T6.5 (1.7 Watt)	
	Alternator / Battery	38 amp (Approx 450 Watts) / 12V 18AH 320 CCA	
FUSES	Brake / Headlamp	15 amp fuse	
	Tail Lamp / Flashers / Indicator Lamps / Horn	Auto Cancel Turn Signal System - 15 amp fuse	
	Engine / PCM	15 amp fuse	
	Ignition / Gauges	15 amp fuse	
	Fuel Pump	10 amp fuse	
	Accessory	15 amp fuse	
	Main Circuit Breaker	40 amp circuit breaker	

All specifications are for standard Victory Kingpin, Kingpin 8-Ball, and Kingpin Tour models. Specifications may change with the addition of custom order options and / or accessories. Polaris Sales Inc. reserves the right without prior notice to discontinue at any time at its discretion any of the items herein or change specifications or designs without incurring any obligation to the customer.

VEHICLE LOADING

WEIGHT CAPACITY - TOP BOX AND SADDLEBAGS

When operating a motorcycle with original equipment or accessory saddlebags and / or top box (trunk):

- Never ride at speeds exceeding 80 mph (129 km/h). Depending on load and weather conditions, the maximum safe operating speed may be less than 80 mph (129 km/h). Saddlebags and / or top box, combined with the lifting or buffeting effects of wind, can make the motorcycle unstable and cause loss of control.
- Distribute weight evenly in each of the saddlebags.
- Do not exceed the maximum cargo weight limit of original equipment or accessory saddlebags or trunk.

  Leather, semi-hard, or hard saddlebags weight capacity: 7 lbs (3.2 kg) each

  Top box weight capacity: 20 lbs (9 kg)
- Do not exceed the motorcycle's Gross Vehicle Weight Rating (GVWR). Exceeding the weight capacity can reduce stability and handling and cause loss of control.

LOADING EXAMPLES FOR GROSS VEHICLE WEIGHT RATING (GVWR) - VEGAS®

Example 1: Vegas® with no accessories or cargo (GVWR 1151 lbs / 522 kg)

Item	Weight
Motorcycle - with full capacity of all fluids	686 lbs (311 kg)
Operator - with recommended riding apparel	230 lbs (104 kg)
Passenger - with recommended riding apparel.	165 lbs (75 kg)
Total Weight	**1081 lbs (490 kg)**

Example 2: Vegas® with accessory saddlebags (GVWR 1151 lbs / 522 kg)

Item	Weight
Motorcycle - with full capacity of all fluids	686 lbs (311 kg)
Weight of leather saddlebags and brackets	12 lbs (5.5 kg)
Cargo - optional saddlebags at capacity	14 lbs (6 kg)
Operator - with recommended riding apparel	230 lbs (104 kg)
Passenger - with recommended riding apparel	165 lbs (75 kg)
Total Weight	**1107 lbs (502 kg)**

Example 3: Vegas Low™ with no accessories or cargo (GVWR 1134 lbs / 514 kg)

Item	Weight
Motorcycle - with full capacity of all fluids	679 lbs (308 kg)
Operator - with recommended riding apparel	230 lbs (104 kg)
Total Weight	**909 lbs (412 kg)**

NOTE: As shown in Example 2, the weight of any accessory items (leather saddlebags and brackets) *in addition* to the cargo, must be added to the base weight of the motorcycle. NEVER exceed GVWR.

LOADING EXAMPLES FOR GROSS VEHICLE WEIGHT RATING (GVWR) - KINGPIN®

Example 4: Kingpin® with no accessories or cargo (GVWR 1234 lbs / 560 kg)

Item	Weight
Motorcycle - with full capacity of all fluids	704 lbs (319 kg)
Operator - with recommended riding apparel	230 lbs (104 kg)
Passenger - with recommended riding apparel.	165 lbs (75 kg)
Total Weight	**1099 lbs (498 kg)**

Example 5: Kingpin® Tour with cargo (GVWR 1234 lbs / 560 kg)

Item	Weight
Motorcycle - with full capacity of all fluids	769 lbs (349 kg)
Cargo - top box at capacity	20 lbs (9 kg)
Cargo - saddlebags at capacity	14 lbs (6 kg)
Operator - with recommended riding apparel	230 lbs (104 kg)
Passenger - with recommended riding apparel	165 lbs (75 kg)
Total Weight	**1198 lbs (543 kg)**

NOTE: The weight of any accessory items such as saddlebags and brackets that are not standard equipment, or individual items *in addition* to the cargo, must be added to the base weight of the motorcycle. NEVER exceed GVWR.

REFINISHING

Victory Touch-Up and Refinishing Paint

Service Paint products are available in three different sizes and applications. Some paint colors require up to 3 components to create a color. Prices subject to change without notice. Dealer is responsible for freight on paint and paint products.

.6 ounce bottle: (Order Multiple of 2) For brush touch-up of small nicks.

10 ounce aerosol can: (Order Multiple of 2)
Apply light even coats for best results. Recoat time is from 30-60 minutes or after 4 days of drying to prevent lifting.

Quarts: (Sold as each)
For repaint of properly prepared plastic components or metal substrates.
Paint is a high quality acrylic urethane manufactured by U.S. Paint.
Mix as indicated on back of paint can. Paint can be recoated after paint is tack free or has ”flashed off”.
Paint finish may be wet sanded and buffed after coating has cured.

How to order:
Authorized Victory Dealers only. Place your order via the dealer web site at:
www.polarisdealers.com / News Forms & Links / Pure Polaris

NOTE: There will be a 25% service fee charged for all returns. Polaris dealer will be responsible for return freight

Victory detail and finish restorer kits

A Detail Kit (polish, wax, and dressing) and a Restore Kit (polish, and swirl / scuff remover) is available from the Victory parts department for painted surface protection and to remove minor surface imperfections.

Detail Kit: 2872195 Includes Non-Abrasive Wash, Swirl Remover / Polish, Polywax Final Finish, Vinyl / Rubber Protector, Applicator and Cloth.

Restore / Polish: 2872192 (12 oz. Aerosol)

Painting Terms

The following terms describe the general operations referred to in the Paint Color Code chart on page 1.14.

E-Coat (Factory Applied): This material is used as a rust protection. It is also used to form a bond between bare metal and the primer or base coat. Full-hide colors (such as black) do not require primer.

Primer: Primer is necessary when applying some colors such as Flame Yellow, Sonic Blue, Solar Red, etc. The purpose of a primer coat is to prevent bleed-through or transparency in subsequent color coats.

Base Coat: A color paint layer applied under another color or under the clear topcoat to improve color matching and consistency.

Top Coat: Outermost layer of paint or clear coat.

Paint Colors by Model

Refer to www.polarisdealers.com for more information.

The 9th letter of the model number designate the color. “P” in the 10th position indicates Premium model. Premium models could be equipped with billet wheels, chrome package, HID headlamp, etc.

NOTE: Refer to page 1.14 for paint color code. Detailed paint ordering information is available on the dealer web site at News, Forms & Links / Pure Polaris / Paint Codes & Part Numbers. Refer to page 1.15 for model number descriptor.

VEGAS® MODEL YEAR 2008	
Model Number	**Model**
V08GB26CA, CAP	Vegas, CND, Solid Black
V08GB26DA, DAP	Vegas, 49st, Solid Black
V08GB26LA, LAP	Vegas, CAL, Solid Black
V08GB26CC, CCP	Vegas, CND, Midnight Cherry
V08GB26DC, DCP	Vegas, 49st, Midnight Cherry
V08GB26LC, LCP	Vegas, CAL, Midnight Cherry
V08GB26CD	Vegas, CND, Steel Gray
V08GB26DD	Vegas, 49st, Steel Gray
V08GB26LD	Vegas, CAL, Steel Gray
V08GB26CFP	Vegas, CND, Blue / Black
V08GB26DFP	Vegas, 49st, Blue / Black
V08GB26LFP	Vegas, CAL, Blue / Black
V08GB26CGP	Vegas, CND, Red / Flame
V08GB26DGP	Vegas, 49st, Red / Flame
V08GB26LGP	Vegas, CAL, Red / Flame
V08GB26UG	Vegas, UK, Red / Flame
VEGAS LOW™	
Model Number	**Model**
V08LB26CA, CAP	Vegas Low, CND, Solid Black
V08LB26DA, DAP	Vegas Low, 49st, Solid Black
V08LB26LA, LAP	Vegas Low, CAL, Solid Black
V08LB26CC, CCP	Vegas Low, CND, Midnight Cherry
V08LB26DC, DCP	Vegas Low, 49st, Midnight Cherry
V08LB26LC, LCP	Vegas Low, CAL, Midnight Cherry
V08LB26UC	Vegas Low, UK, Midnight Cherry
V08LB26CE, CEP	Vegas Low, CND, Boardwalk Blue
V08LB26DE, DEP	Vegas Low, 49st, Boardwalk Blue
V08LB26LE, LEP	Vegas Low, CAL, Boardwalk Blue
VEGAS 8-BALL® MODEL YEAR 2008	
Model Number	**Model**
V08AB26CA	Vegas 8-Ball, CND, Black
V08AB26DA	Vegas 8-Ball, 49st, Black
V08AB26LA	Vegas 8-Ball, CAL, Black

KINGPIN® MODEL YEAR 2008	
Model Number	**Model**
V08CB26CA, CAP	Kingpin, CND, Black
V08CB26DA, DAP	Kingpin, 49st, Black
V08CB26LA, LAP	Kingpin, CAL, Black
V08CB26CC	Kingpin, CND, Midnight Cherry
V08CB26DC	Kingpin, 49st, Midnight Cherry
V08CB26LC	Kingpin, CAL, Midnight Cherry
V08CB26CD	Kingpin, CND, Steel Gray
V08CB26DD	Kingpin, 49st, Steel Gray
V08CB26LD	Kingpin, CAL, Steel Gray
V08CB26CHP	Kingpin, CND, Sands Metallic / Black
V08CB26DHP	Kingpin, 49st, Sands Metallic / Black
V08CB26LHP	Kingpin, CAL, Sands Metallic / Black
V08CB26CIP	Kingpin, CND, Black / Flame
V08CB26DIP	Kingpin, 49st, Black / Flame
V08CB26LIP	Kingpin, CAL, Black / Flame
KINGPIN® TOUR MODEL YEAR 2008	
Model Number	**Model**
V08CD26CA	Kingpin Tour, CND, Black
V08CD26DA	Kingpin Tour, 49st, Black
V08CD26LA	Kingpin Tour, CAL, Black
V08CD26CC	Kingpin Tour, CAN, Midnight Cherry
V08CD26DC	Kingpin Tour, 49st, Midnight Cherry
V08CD26LC	Kingpin Tour, CAL, Midnight Cherry
V08CD26CD	Kingpin Tour, CAN, Steel Gray
V08CD26DD	Kingpin Tour, 49st, Steel Gray
V08CD26LD	Kingpin Tour, CAL, Steel Gray
V08CD26CH	Kingpin Tour, CAN, Sands Metallic / Black
V08CD26DH	Kingpin Tour, 49st, Sands Metallic / Black
V08CD26LH	Kingpin Tour, CAL, Sands Metallic / Black
V08CD26CI	Kingpin Tour, CAN, Black / Flame
V08CD26DI	Kingpin Tour, 49st, Black / Flame
V08CD26LI	Kingpin Tour, CAL, Black / Flame
V08CD26UI	Kingpin Tour, UK, Black / Flame
KINGPIN 8-BALL™ MODEL YEAR 2008	
Model Number	**Model**
V08PB26CA	Kingpin 8-Ball, CAN, Black
V08PB26DA	Kingpin 8-Ball, 49st, Black
V08PB26LA	Kingpin 8-Ball, CAL, Black
V08PB26UA	Kingpin 8-Ball, UK, Black

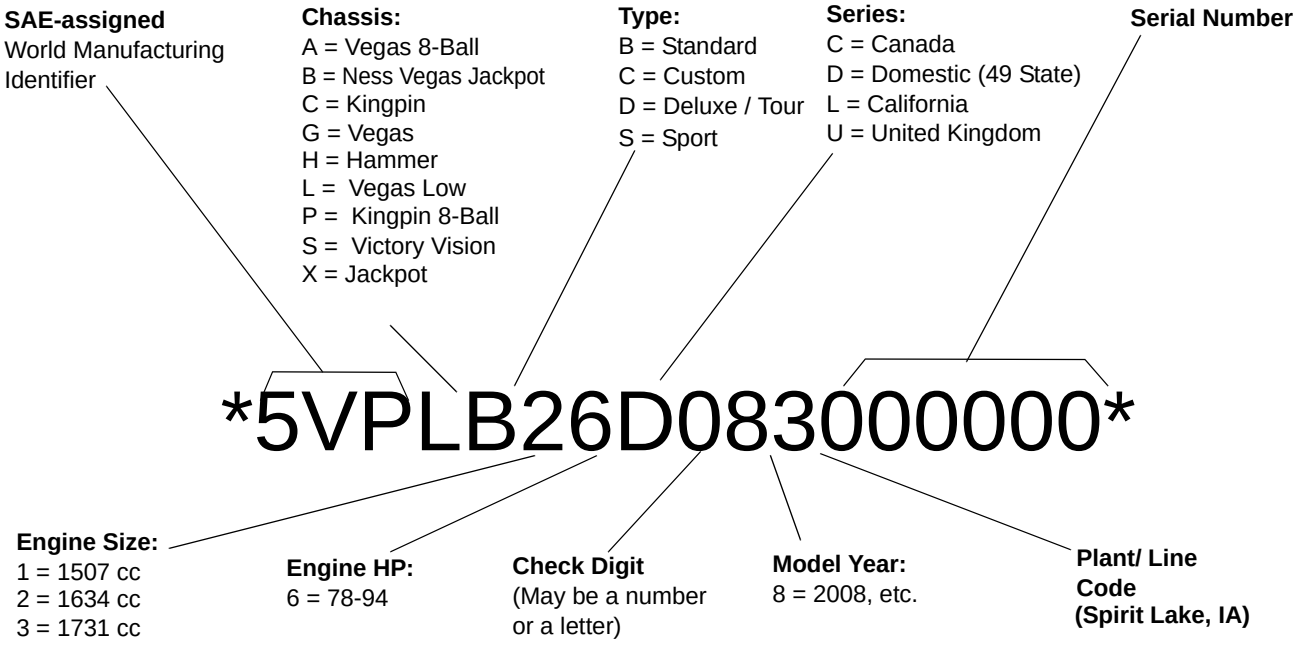
PAINT COLOR CODES

PAINT COLOR: 2008	PAINT CODE	NOTES
Cruiser Black (PHAT)	P-266	
Turbo Silver	P-445	Paint kits require base coat with a topcoat of Clear Metallic (CM)
Flat Black	P-463	
Sunset Red	P-520	
Boardwalk Blue	P-524	Requires P-519 Clear Pearl Topcoat
Ness Metallic Purple	P-543	
Supersteel Gray	P-553	Requires P-519 Clear Pearl Topcoat
Midnight Cherry	P-554	
Sands Metallic	P-555	(Kingpin Only)
Anodized Aluminum	P-565	
Metallic Flake Additive	METALLIC	Add vial of flake to quart of clear base
Silver Undercoater	SU	Base coat only
Antares Red Undercoater	RU	Base coat only
Clear	C	
Clear Metallic	CM	Clear with metal flake added
Clear Pearl	CP	Clear with pearl flake added
UNDERCOATERS (Base Coat Only)	WU, OWU, PWU, VVU	WU=White Undercoater; OWU=Off-White Undercoater; PWU=Pearl White Undercoater; VVU=Victory Violet Undercoater

VEHICLE INFORMATION

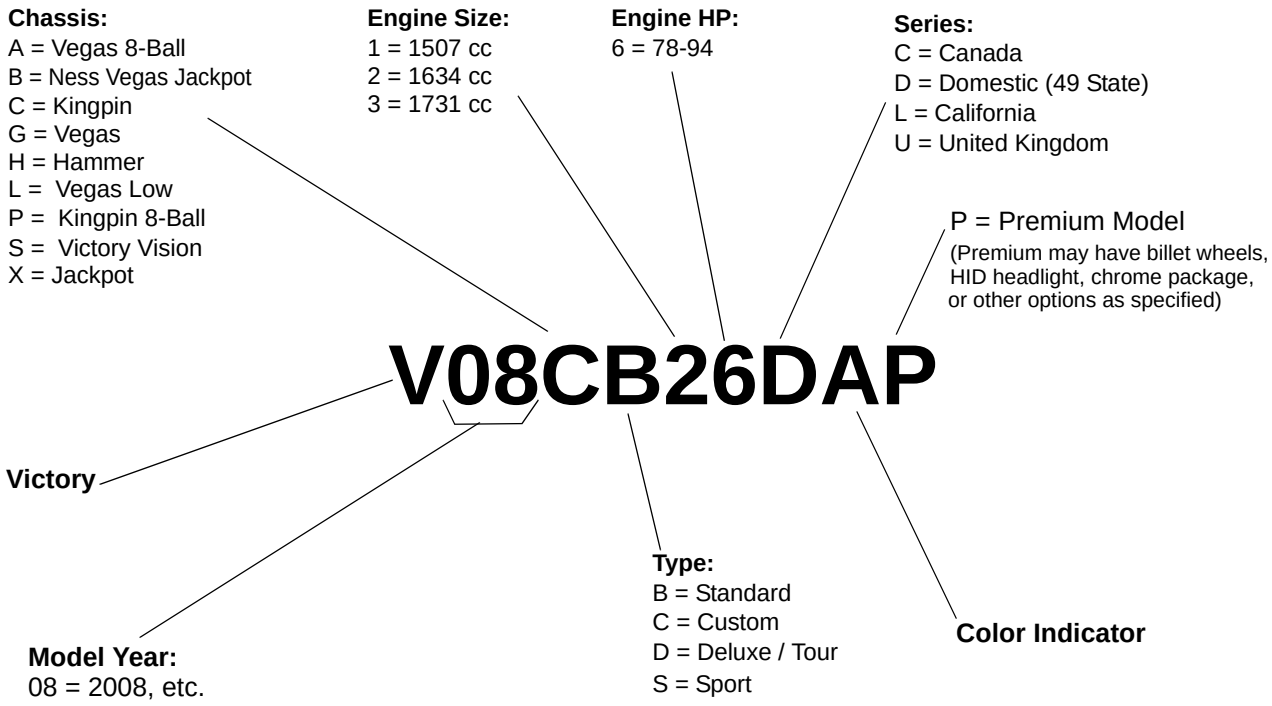
Vehicle Identification Number (VIN)

See “VIN NUMBER LOCATION” on page 1.16. for location on the vehicle.



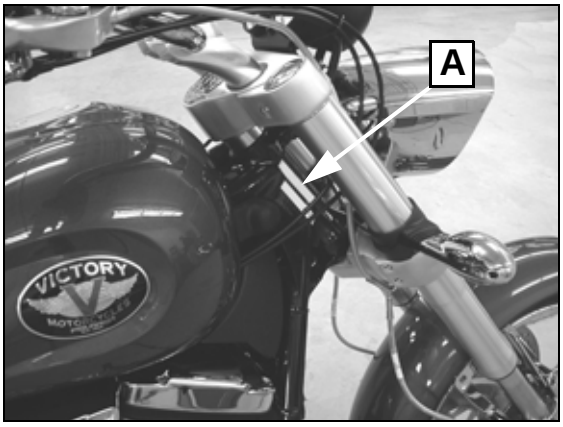
Model Number

See “MANUFACTURER LABEL” on page 1.16. for location on vehicle. See “Paint Colors by Model” on page 1.12. for color.



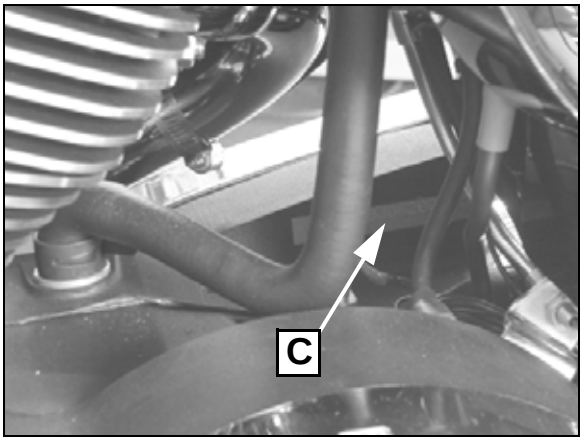
VIN NUMBER LOCATION

The vehicle identification number (A) is stamped on the right side of the steering head.



ENGINE NUMBER LOCATION

The engine number (C) is stamped into the right crankcase boss. The stamping identifies the engine model and serial number.



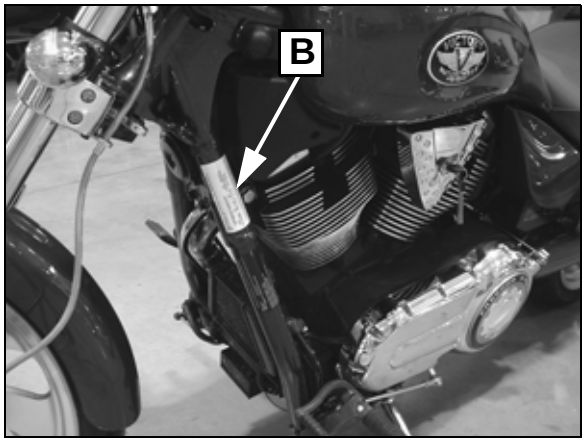
MANUFACTURER LABEL

The manufacturer label (B) located on the left frame tube contains the following information:

VIN Number

Gross Vehicle Weight Rating (GVWR)

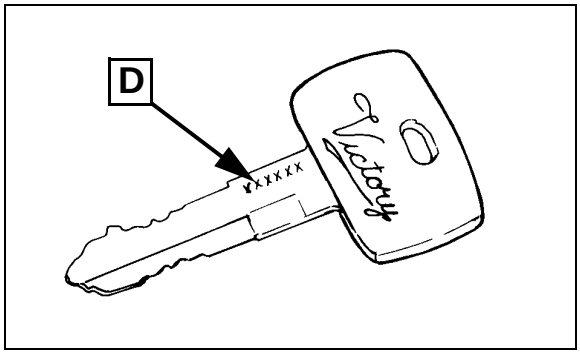
Gross Axle Weight Rating (GAWR)



KEY IDENTIFICATION NUMBER

The key identification number (D) is stamped on the key tag. If the key and the identification number are lost or misplaced, the lock set (ignition switch / fuel cap) must be replaced.

Key blanks are available from Victory. Locksmiths familiar with the motorcycle industry will be able to cut a replacement key with the key I.D. number and a Victory key blank.



PUBLICATIONS & TECHNICAL LITERATURE

Publication Part Numbers

Some Victory publications, such as Owner's Manuals and Parts Books are available on-line and can be downloaded from the Victory motorcycles web site (http://www.polarisindustries.com/en-us/Victory/). Click on the *Riders* pull down menu and select *Manuals and Parts*.

Service Manuals can be purchased through any authorized Victory motorcycle dealer. The part numbers are listed in the following table. Some manuals are available for purchase on-line at *www.purepolaris.com*.

VICTORY SERVICE MANUAL PART NUMBERS	
2002 - 2006 Classic & Touring Cruiser	9919632
2003-2006 Vegas / Kingpin / 8-Ball / Ness Signature Series Vegas & Kingpin	9920337
2005-2006 Hammer / 2006 Vegas Jackpot	9920340
2007 Vegas / Vegas 8-Ball / Kingpin / Kingpin Tour	9920837
2007 Hammer / Hammer S / Vegas Jackpot / Ness Signature Series Vegas Jackpot	9920838
2008 Hammer / Hammer S / Vegas Jackpot / Ness Signature Series Vegas Jackpot	9921247
2008 Victory Vision	9921254

Material Safety Data Sheet (MSDS)

To review or print a Material Safety Data Sheet for Victory maintenance products, chemicals or lubricants:

DEALERS: visit www.polarisdealers.com / news forms & links / pure polaris OR contact Dealer Support

NON-DEALERS: please contact Polaris Customer Service at: 1-888-704-5290 (French speaking 1-204-925-7100)

BREAK IN PERIOD

Break-In Procedure

There is never a more important period in the life of a new Victory motorcycle than the period between zero and 500 miles (805 km). A Victory motorcycle is manufactured using the best possible materials and manufacturing techniques, but the final machining process is the break-in. During break-in period, many parts in the engine wear and polish to correct operating clearances. During this time, the operator should:

- Avoid prolonged full throttle operation.
- Avoid operation which might result in excessive heating of the engine.

The general break-in guidelines are as follows:

BREAK-IN GUIDELINES		
Miles/km	**Throttle Position**	**Notes**
0-90 miles	0-1/3	Avoid prolonged operation above 1/3 throttle. Stop engine and let it cool following every hour of operation. Vary speed of motorcycle. Do not operate machine at one set throttle position.
90-300 miles	0-1/2	Avoid prolonged operation above 1/2 throttle. Stop engine and let it cool following every hour of operation. Vary speed of the motorcycle. Do not operate machine at one set throttle position.
300-500 miles	0-3/4	Avoid cruising speeds above 3/4 throttle.
500 miles	**Replace the engine oil and engine oil filter.** Perform 500 mile service on the machine. See chapter 2 for more information.	
500 +	Avoid prolonged full-throttle operation. Vary the engine speed occasionally. Follow the pre-ride inspection outlined in the owner's manual.	

EMISSIONS

Emission Control Systems

The U.S. Environmental Protection Agency and California Air Resources Board (CARB) require manufacturers to certify that their motorcycles comply with applicable exhaust emissions standards during their useful life, and that motorcycles built after January 1, 1983 comply with applicable noise emission standards for one year or 6,000 km (3,730 mi) after the time of sale to the ultimate purchaser, when operated and maintained according to the instructions provided.

Emission Sources

An internal combustion engine produces carbon monoxide and hydrocarbons during operation. Hydrocarbons must be controlled because under some conditions hydrocarbons react with sunlight to produce photochemical smog. Carbon monoxide must be controlled because it is toxic.

Exhaust Emission Control

Victory Motorcycles have an electronic engine management system which controls fuel delivery and ignition timing to control hydrocarbon and carbon monoxide emissions. Except for TPS adjustments as required by the Periodic Maintenance Interval Table on page 2.6 or if components are replaced that affect idle speed, no adjustments should be made to the system.

Noise Emission Control System

Tampering with Noise Control Systems is Prohibited. Federal law prohibits the following acts or causing thereof:

1. The removal or rendering inoperative by any person other than for purposes of maintenance, repair or replacement, any device or element of design incorporated into the motorcycle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or
2. The use of the motorcycle after such device or element of design has been removed or rendered inoperative.

Among those acts presumed to constitute tampering are the acts listed below:

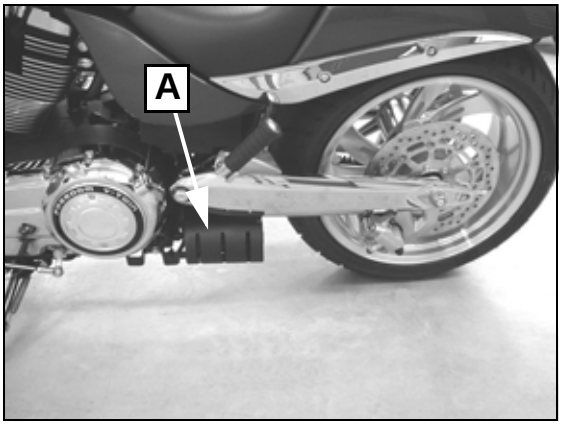
1. Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.
2. Removal or puncturing of any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving part of the motorcycle or parts of the exhaust / intake system with parts other than those specified by the manufacturer.

Crankcase Emission Control

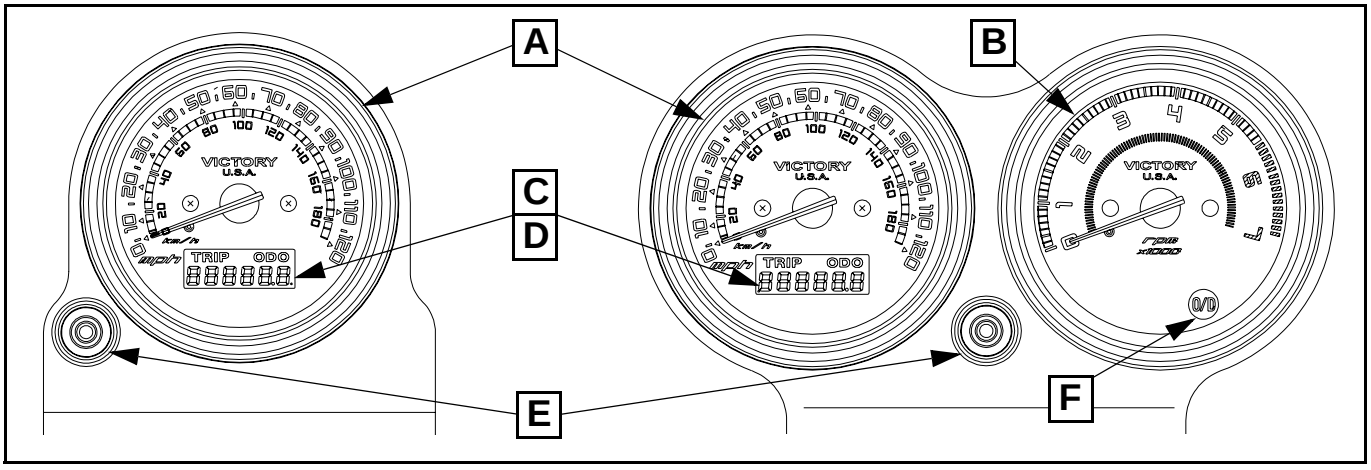
The crankcase emission control system is comprised of a closed system that routes crankcase emissions through the air cleaner into the combustion chamber.

Evaporative Emission Control (California Models)

California models are equipped with an Evaporative Emissions Canister (A). Activated charcoal inside the canister temporarily stores fuel vapor from the fuel tank vent system until the engine is started and the motorcycle is driven. Refer to page 5.7 for system diagram and page 2.19 for system maintenance.



INSTRUMENTS



Speedometer (A)

The speedometer receives an input signal from the speed sensor located on top of the crankcase behind the rear cylinder. Pulse signals from the speed sensor are converted inside the speedometer to speed and distance outputs in miles (kilometers in Canada). These outputs are displayed by the analog needle (speed) or in the LCD window (distance). The speedometer operates only when the ignition switch is in the On position and the speed sensor has an input (vehicle is moving). Refer to Chapter 19 for speedometer or sensor diagnostics.

Tachometer (B)

The tachometer (if equipped) reports current engine speed in revolutions per minute (RPM). A red line on the gauge indicates maximum safe engine RPM. The tachometer may be standard equipment or added as an option or accessory on some models.

⚠ WARNING
Do not operate the engine over redline RPM. Excessive RPM could cause engine damage or failure that could result in you losing control of the motorcycle.

Odometer (C)

The odometer is the default mode of the speedometer LCD after starting the engine and displays the total miles traveled (km in Canada).

To toggle the display between Odometer and TRIP Odometer, the ignition switch must be in the ON position. Press the reset button (E). The display changes to “TRIP".

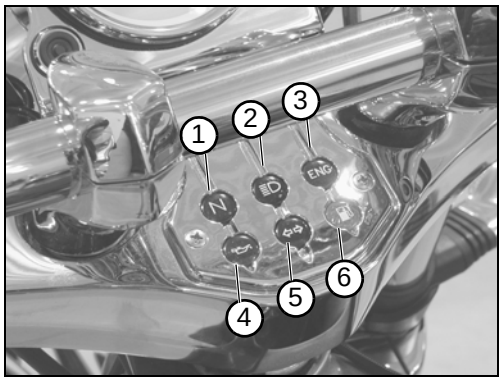
Trip Odometer (D)

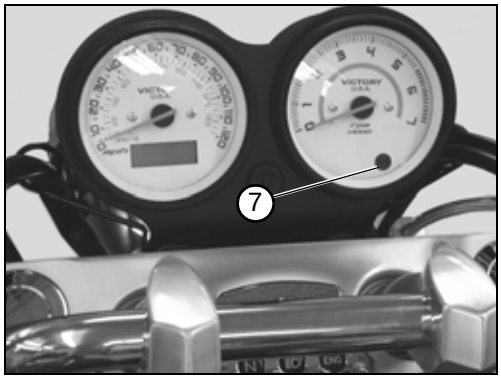
The trip odometer shows total distance traveled since the trip odometer was reset.

To toggle the display between Odometer and TRIP Odometer, the ignition switch must be in the ON position. Press the reset button. The display changes to TRIP.

To reset the trip odometer, the ignition switch must be in the ON position with the display in trip odometer mode. Press and hold the reset button (E) until the TRIP odometer display resets to zero.

INDICATOR LIGHTS





#	SYMBOL / FUNCTION	OPERATION
1	NEUTRAL INDICATOR	The neutral indicator illuminates when the transmission is in Neutral, and the ignition key is ON.
2	HEADLAMP HIGH BEAM	The headlamp high beam indicator illuminates when the headlamp switch is set to High and the ignition key is ON.
3	CHECK ENGINE INDICATOR	The check engine indicator will illuminate any time the ignition key is ON and the engine control module sensors report abnormal sensor or engine operation. The check engine indicator will continue to illuminate as long as the fault condition exists. It also illuminates momentarily when the ignition key is ON and the engine is not running. This demonstrates that the indicator is functioning properly.
4	LOW OIL PRESSURE INDICATOR	The low oil pressure indicator illuminates when engine oil pressure drops below safe operating pressure. If this indicator illuminates while the engine is running, turn the engine off immediately and check the oil level. Add oil if necessary. If the oil level is correct and the indicator remains illuminated after the engine is restarted, turn the engine off immediately. The low oil pressure indicator also illuminates when the ignition key is ON and the engine is not running. This demonstrates that the indicator is functioning properly.
5	TURN SIGNAL INDICATOR	The turn signal indicator flashes when the left, right, or both turn signals are active. If a turn signal bulb has failed, or if there is a short circuit in the turn signal system, the turn signal indicator flashes at more than twice the normal rate. This indicator is also used as the output display for the diagnostic “blink codes” when using the self-diagnostic feature of the Auto-Cancel Turn Signal system. Refer to Chapter 9 for more information on the self diagnostic feature.
6	LOW FUEL INDICATOR	The low fuel indicator illuminates when approximately 0.6 gallons (2.27 liters) of fuel remains in the fuel tank and the ignition key is ON.
7	OVERDRIVE INDICATOR	On vehicles equipped with a tachometer, the overdrive indicator is illuminated when the transmission is in Overdrive (6th gear) and the ignition key is ON.

SPECIAL SERVICE TOOLS

GENERAL & PRECISION MEASUREMENT

TOOL	PART NUMBER
Bearing & Seal Driver Set	PV-43558
Bore Gauge Set, 50-100mm	PV-3017
Decal, Service Bulletin Completion	7170107 (Order from Victory Parts Dept.)
Dial Caliper (Metric, 0-150mm)	PV-26900-7
Dial Caliper (Electronic Conversion. English 0-6” / Metric 0-150mm)	PV-39776
Dial Indicator, Adjustable (Metric. 10mm travel)	PV-26900-12
Dial Indicator Stand, Flexible. Magnetic Base	PV-34481
Engine Ear Listening Device	PV-39565
Feeler Gauge Set	PV-26900-8 or PV-26900-9
Outside Micrometer (0-25 & 25-50mm)	PV-3006, PV-3007
Outside Micrometer Set (0-100mm)	PV-3009
Plastigauge®	Commercially Available
Small Hole Gauge Set	Commercially Available
Straight Edge, Precision	PV-34673
Surface Plate	Commercially Available
Telescoping Gauge Set	PU-45423
Torque Wrench (3/8” Drive 0-50 in-lb. beam type)	PV-43543
Torque Wrench (1/2” Drive 0-150 lb-ft. beam type)	PV-43552
Torque Wrench (3/8” Drive 15-100 lb-ft. click type)	PV-43564

TUNE UP & MAINTENANCE

TOOL	PART NUMBER
Belt Tension Gauge	PV-43532
Cylinder Leakdown Tester	PV-35667-A
Compression Gauge Set	PV-33223
Oil Pressure Gauge Set	PV-43531
Oil Filter Wrench	65mm/2.5in. Commercially available

ELECTRICAL

TOOL	PART NUMBER
Ammeter Inductive Clamp for Fluke 73™ Multimeter	PV-39617
Electrical Connector Test Adapter Kit	PV-43526
Inductive Timing Light	PV-43537
Multimeter, Fluke 73™	PV-43546

ENGINE, CLUTCH, & TRANSMISSION

TOOL	PART NUMBER
Clutch Shaft Bearing Support (for clutch shaft installation)	PV-47331
Crankcase Assembly Tool (Crankcase Installer)	PV-46299 (Must be used with PV-45030) and Adapter (Extension) PVX-47429
Crankcase Assembly Tool Adapter	PVX-47429
Crankshaft Bearing Protector	PV-47207
Crankshaft Rotation Tool	PV-48736
Crankcase Separator (Crankcase Removal)	PV-47332-A
Engine Hoist or Lift	Commercially Available
Engine Lock Tool	PV-43502-A
Engine Stand	Commercially Available
Flywheel Puller	PV-43533
Mainshaft (Clutch Shaft) Holder	PV-45028
Crankcase Installation Tool (Crankcase Assembly)	PV-46299 (Must be used with PV-45030)
Moly Assembly Paste (Premium Starter Grease)	PN 2871460 (Order from Victory Parts Dept.)
Mainshaft (Output Shaft) Seal Installation Tool	PV-43505
Piston Ring Compressor (97mm +)	Includes PV-43570-1 Pliers, PV-43570-2 Band (3 5/8” to 3 7/8”)
Split Gear Line-Up Tool	Any 1/4” shaft: Example: 1/4” drill bit shank.
Valve Spring Compressors (Adapter is PV-43513-A)	PV-1253 or PV-4019 (Quick Release)

STEERING & SUSPENSION

TOOL	PART NUMBER
Blind Bearing Remover Set	PV-43551
Cartridge Shaft Holder (Kingpin / Hammer)	PV-47060
Damper Rod Holder (Vegas)	PV-43517
Fork Oil Level Gauge	PV-59000-A
Fork Seal Driver 43mm, Inverted (Kingpin / Hammer)	PV-47035
Fork Seal Driver, 43mm, Conventional (Vegas)	PV-47036
Fork Seal Guide Tool, 43mm (Kingpin, Vegas)	PV-47037
Steering Bearing, Wheel Bearing Installation Set	PV-43515
Steering Stem Bearing Removal Tool (Lower)	PV-44683
Steering Stem Bearing Adjustment Socket	PV-43508
Steering Stem Bearing Spanner Wrench	PV-43509
Shock Absorber Pre-Load Adjustment Spanner	PV-46993
Shock Spring Compressor	PV-43571

WHEEL & TIRE

TOOL	PART NUMBER
Air Pressure Gauge	PV-48909 (Victory Air Pump & Gauge) Or Commercially Available Tire Pressure Gauge
Tire Bead Breaker (May be part of the tire removal equipment being used)	Commercially Available
Tire Mounting Lubricant	Commercially Available
Tire Removal Equipment	Commercially Available
Rim Protector	PV-43536
Wheel Balancing/Truing Stand	Commercially Available

FUEL SYSTEM & FUEL INJECTION

SPECIAL TOOLS- FUEL SYSTEM/ FUEL INJECTION	PART NUMBER
(See Chapter 5 for more information)	
Victory/Polaris Diagnostic Tool Kit w/ Diagnostic Software	PV-46085
Smart Link Module Kit (New for 2008 models)	PU-47471
PU-47471 (above) includes items at right (items are available separately)	Smart Link Module (PU-47468)
	Vehicle Interface Cable (PU-47469)
	PC Interface Cable (PU-47470)
Fuel Pressure Gauge	PV-43506
Fuel Pressure Gauge Adapter	PV-48656
Laptop Computer (Refer to diagnostic software user manual or HELP section for minimum specifications	Commercially Available

TOOL ORDERING INFORMATION

Order Special Service Tools from SPX Corporation (Phone 800-328-6657 / FAX 586-578-7375) or use the link on the Victory Dealer Web site.

If you are not a Victory dealer use the phone or FAX number listed above or visit http://polaris.spx.com/

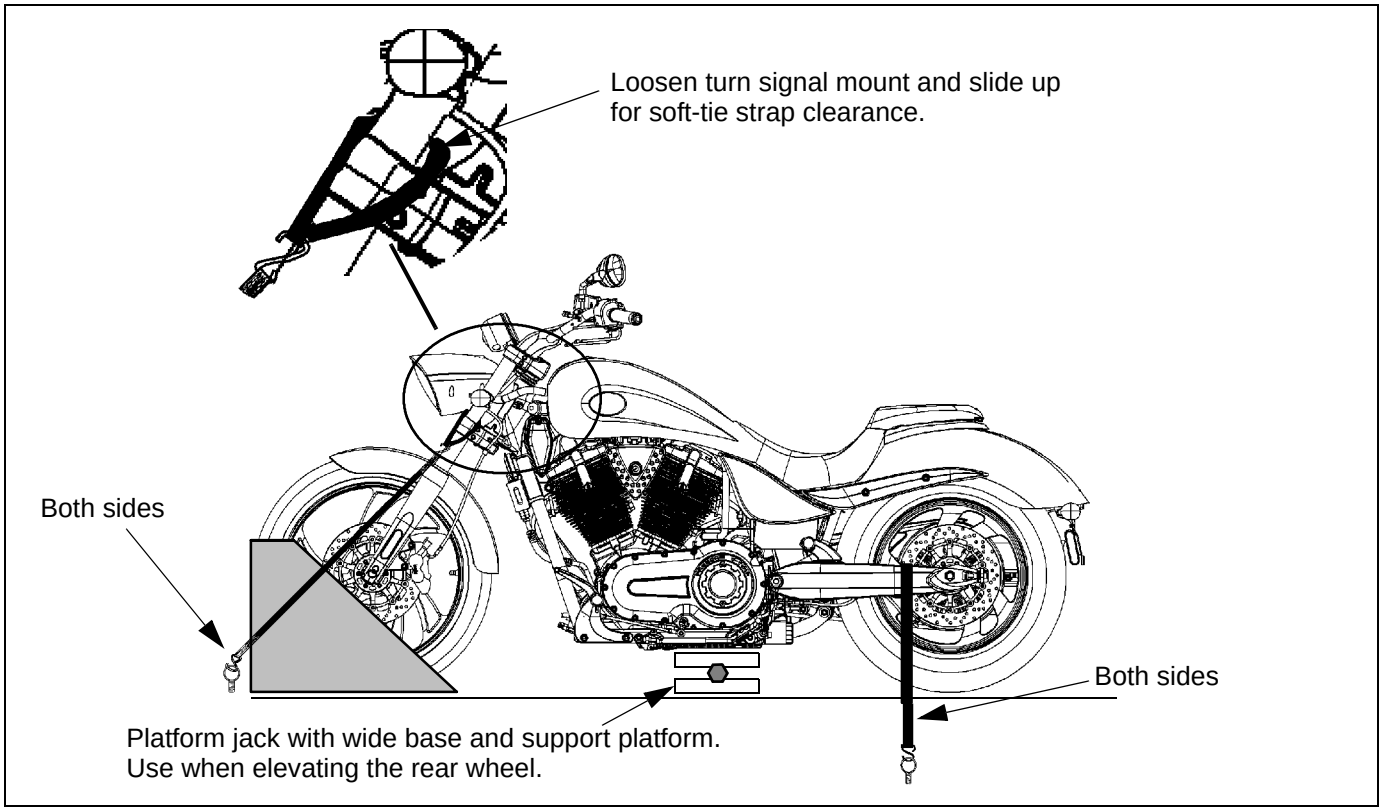
TRANSPORTING AND SECURING THE MOTORCYCLE

GUIDELINES

> **⚠ WARNING**
>
> **Care should be taken to be sure the motorcycle will not tip or fall while elevated. Severe personal injury or death could occur if the motorcycle tips or falls.**

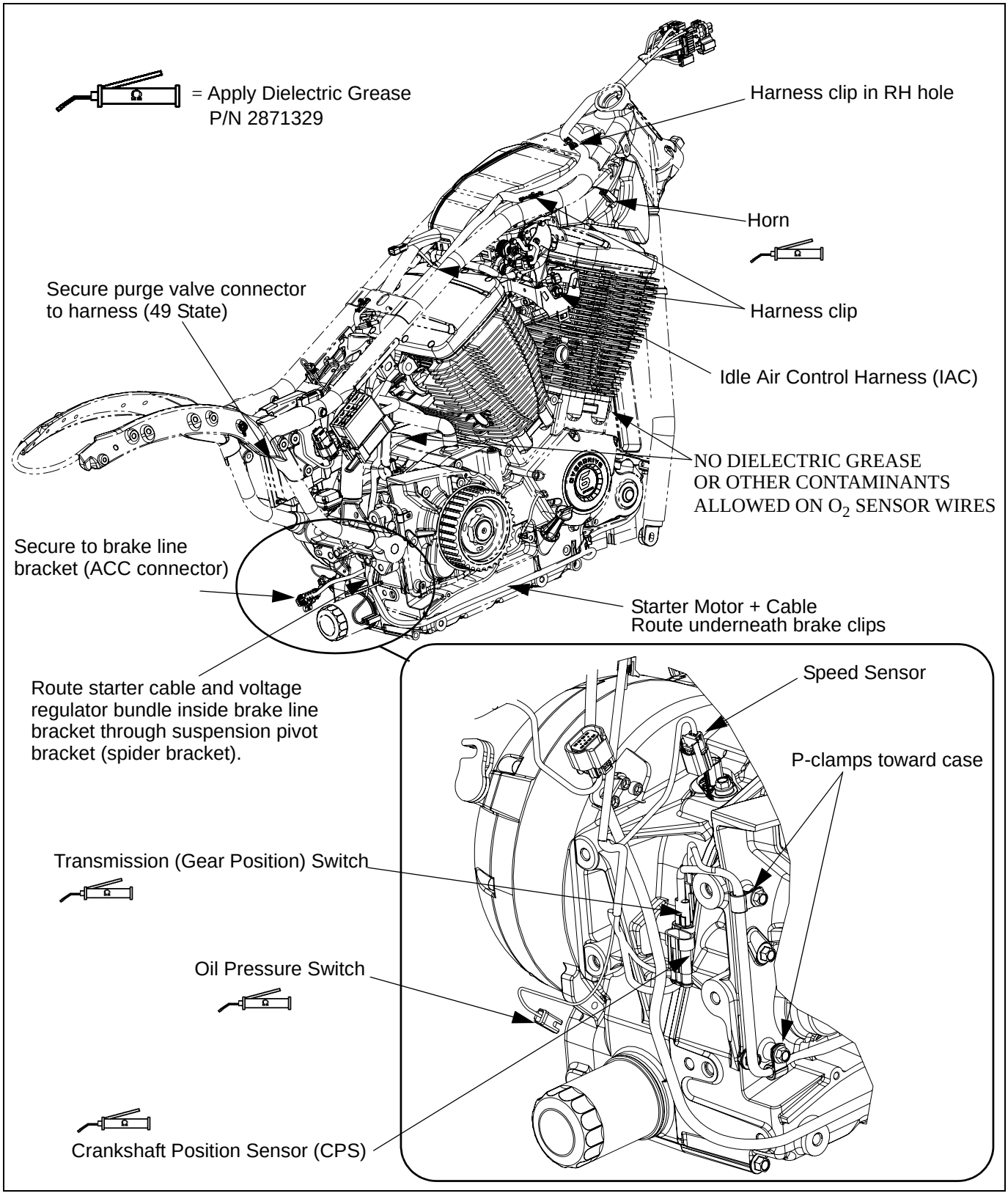
If you must transport the motorcycle or secure it to a lift table:

- Use a truck, trailer, or lift table designed or equipped properly for motorcycles. Review truck, trailer or lift manufacturer's recommendations.
- Do not tow the motorcycle with another vehicle, as towing will impair the motorcycle's steering and handling, which can cause a loss of control.
- Position and restrain the motorcycle so it remains upright on the truck, trailer, or lift table as gasoline may leak out of the fuel tank vent if the motorcycle is transported at extreme angles. Gasoline is a fire hazard and it can also damage the motorcycle's finish.
- Do not restrain the motorcycle using the handlebars. Loosen the turn signals and slide them up the fork tube as shown, enough to make room for a soft tie-down extension strap (no buckles). Place tie downs around the lower triple clamp as shown, around the fork tube below the turn signal mount and above the lower triple clamp.
- Secure the rear of the motorcycle with tiedowns around the swingarm, being careful to avoid brake lines, exhaust, drive belt, or drive belt guards.
- Use a platform jack with a wide stable base that securely supports the motorcycle under the flat portion of the crankcase and frame.

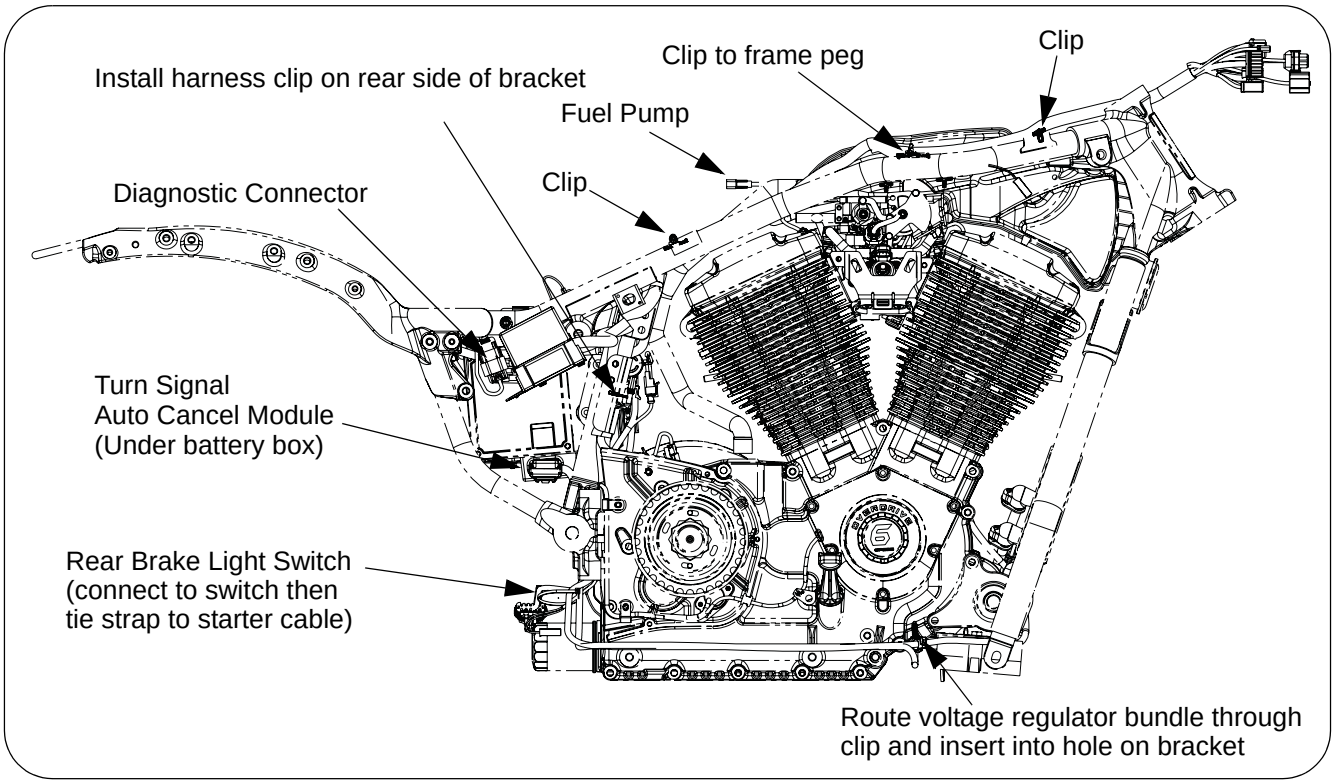

Loosen turn signal mount and slide up for soft-tie strap clearance.
Both sides
Both sides
Platform jack with wide base and support platform.
Use when elevating the rear wheel.

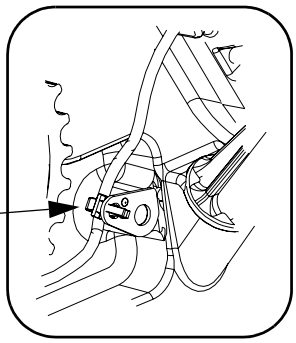
ROUTING DIAGRAMS

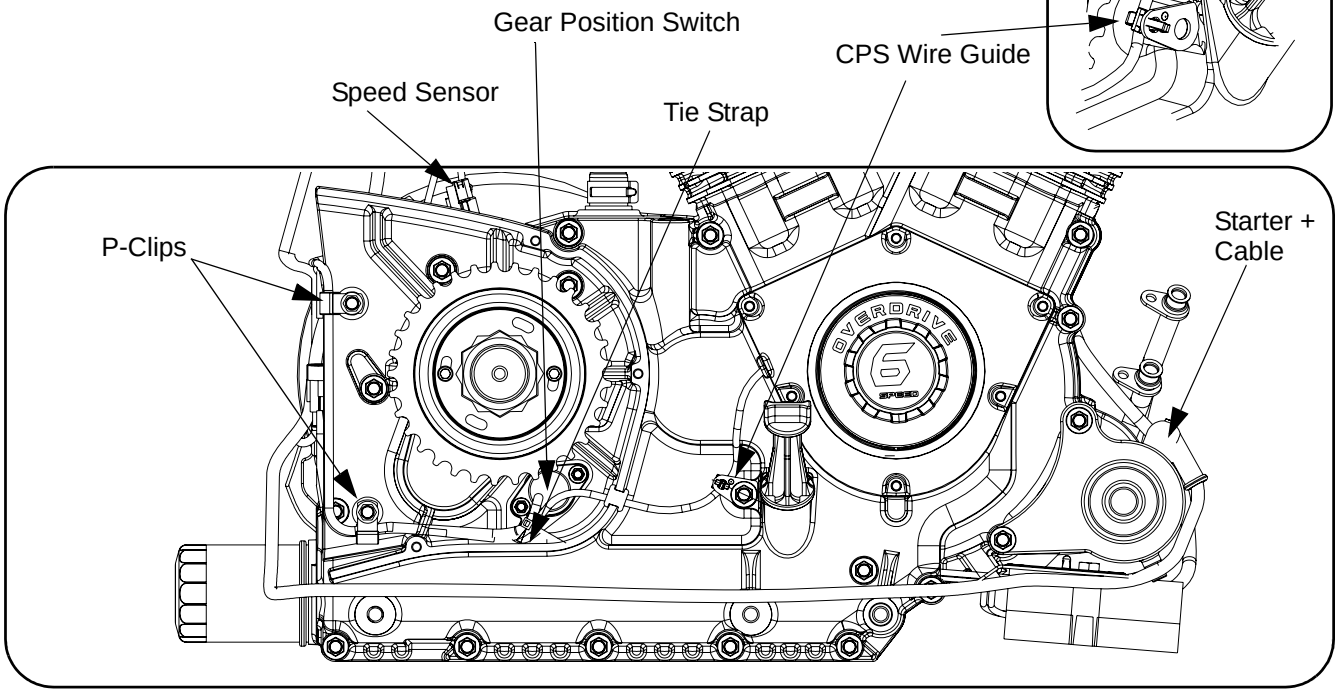
WIRE HARNESS - RIGHT REAR FRAME


= Apply Dielectric Grease
P/N 2871329
Harness clip in RH hole
Horn
Secure purge valve connector to harness (49 State)
Harness clip
Idle Air Control Harness (IAC)
NO DIELECTRIC GREASE OR OTHER CONTAMINANTS ALLOWED ON O_2 SENSOR WIRES
Secure to brake line bracket (ACC connector)
Starter Motor + Cable
Route underneath brake clips
Route starter cable and voltage regulator bundle inside brake line bracket through suspension pivot bracket (spider bracket).
Speed Sensor
P-clamps toward case
Transmission (Gear Position) Switch
Oil Pressure Switch
Crankshaft Position Sensor (CPS)

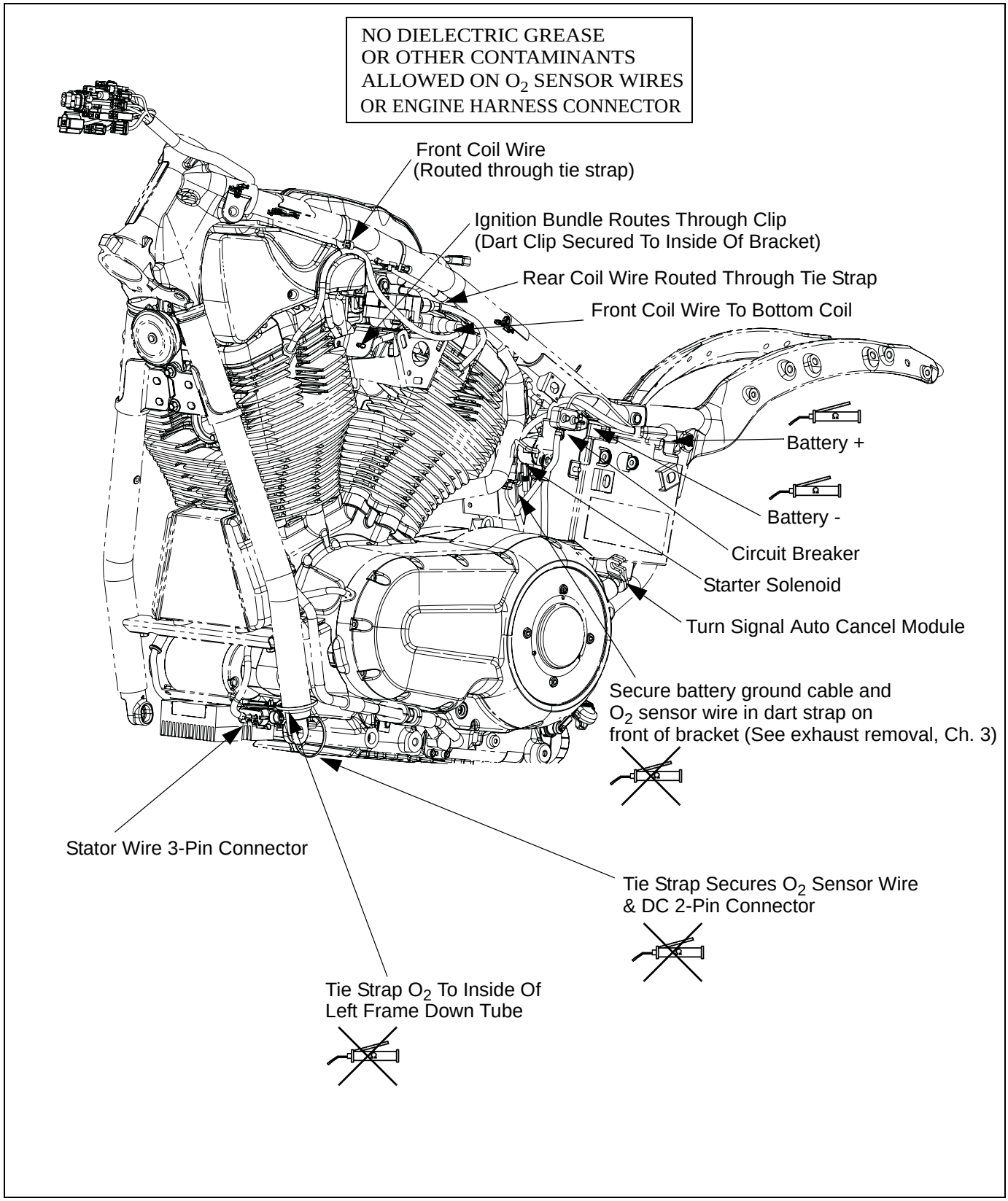
WIRE HARNESS - RIGHT SIDE



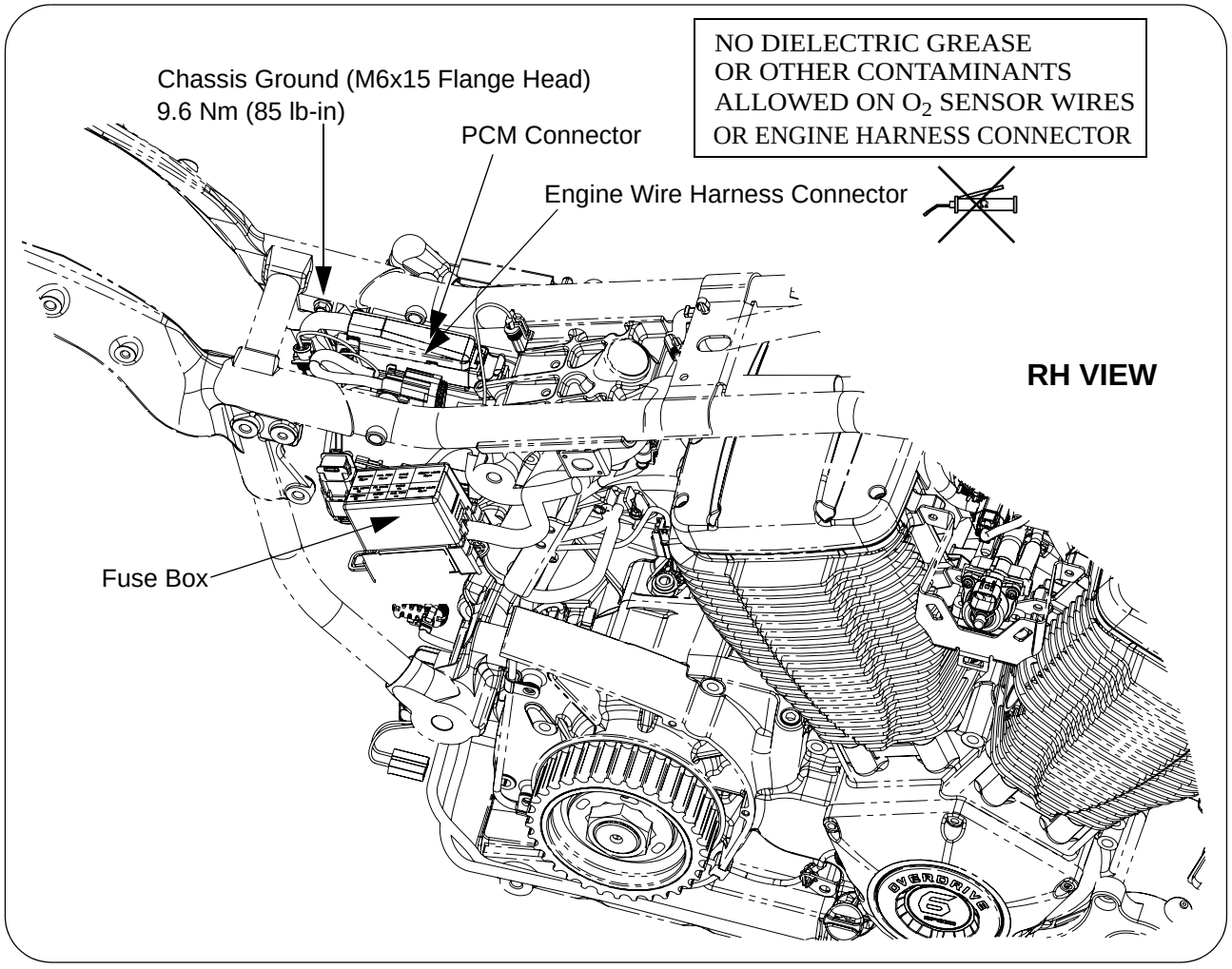


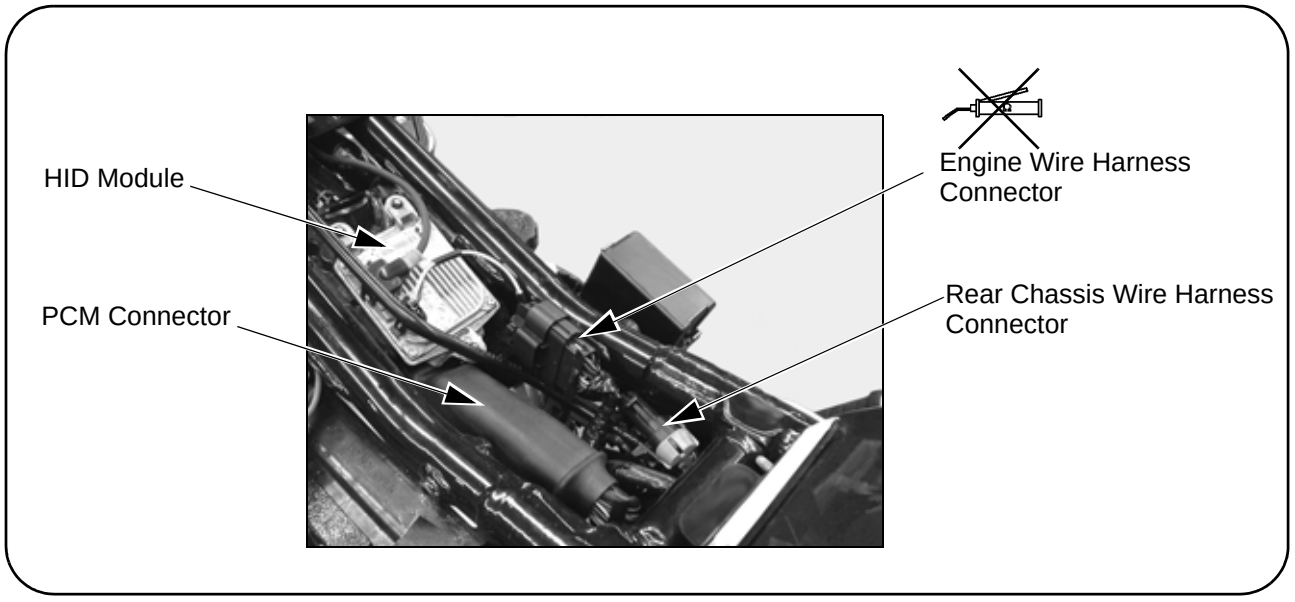


WIRE HARNESS - LEFT SIDE


NO DIELECTRIC GREASE
OR OTHER CONTAMINANTS
ALLOWED ON O_2 SENSOR WIRES
OR ENGINE HARNESS CONNECTOR
Front Coil Wire
(Routed through tie strap)
Ignition Bundle Routes Through Clip
(Dart Clip Secured To Inside Of Bracket)
Rear Coil Wire Routed Through Tie Strap
Front Coil Wire To Bottom Coil
Battery +
Battery -
Circuit Breaker
Starter Solenoid
Turn Signal Auto Cancel Module
Secure battery ground cable and
O_2 sensor wire in dart strap on
front of bracket (See exhaust removal, Ch. 3)
Stator Wire 3-Pin Connector
Tie Strap Secures O_2 Sensor Wire
& DC 2-Pin Connector
Tie Strap O_2 To Inside Of
Left Frame Down Tube

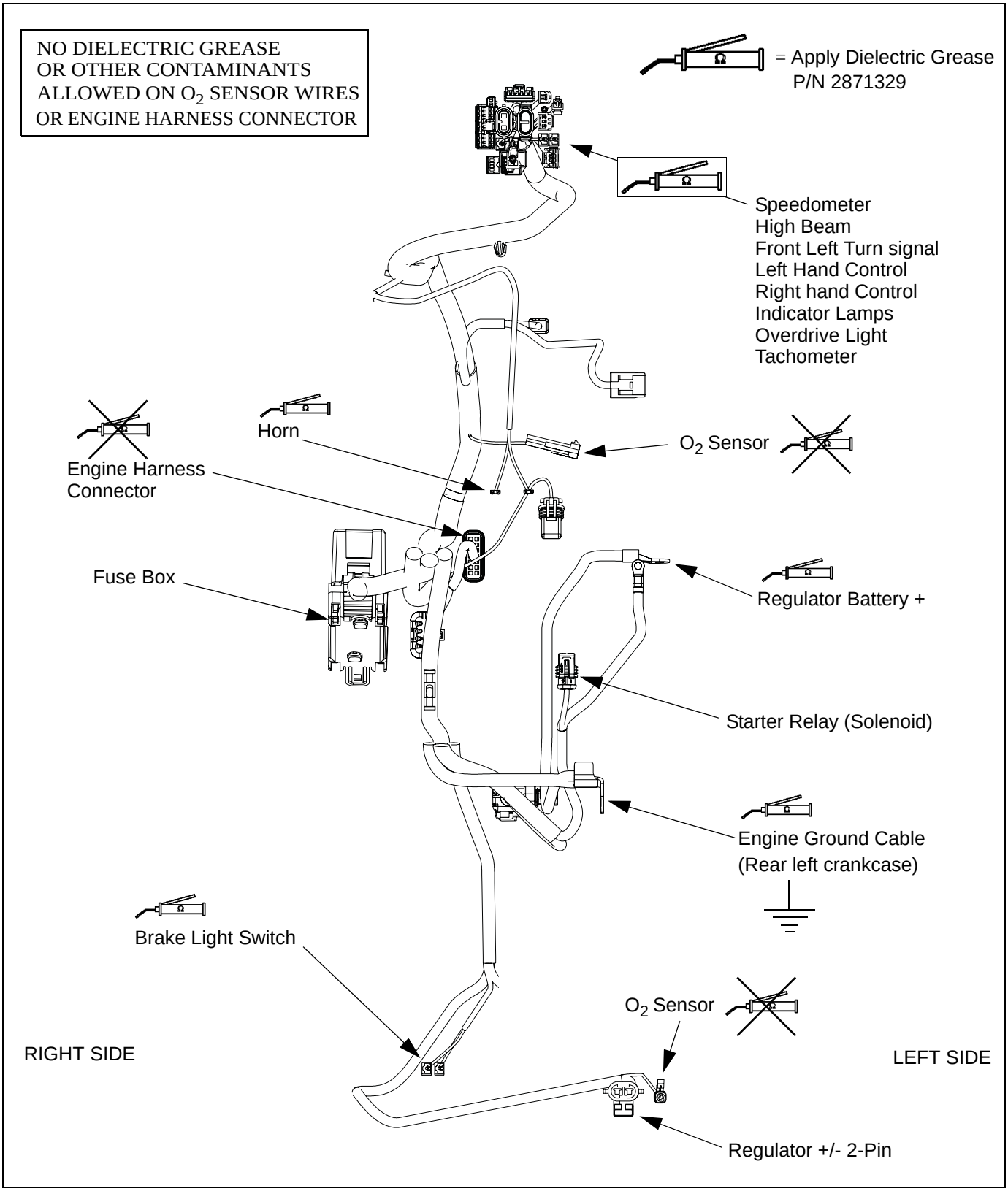
WIRE HARNESS - UNDER SEAT





WIRE HARNESS CONNECTOR LOCATIONS

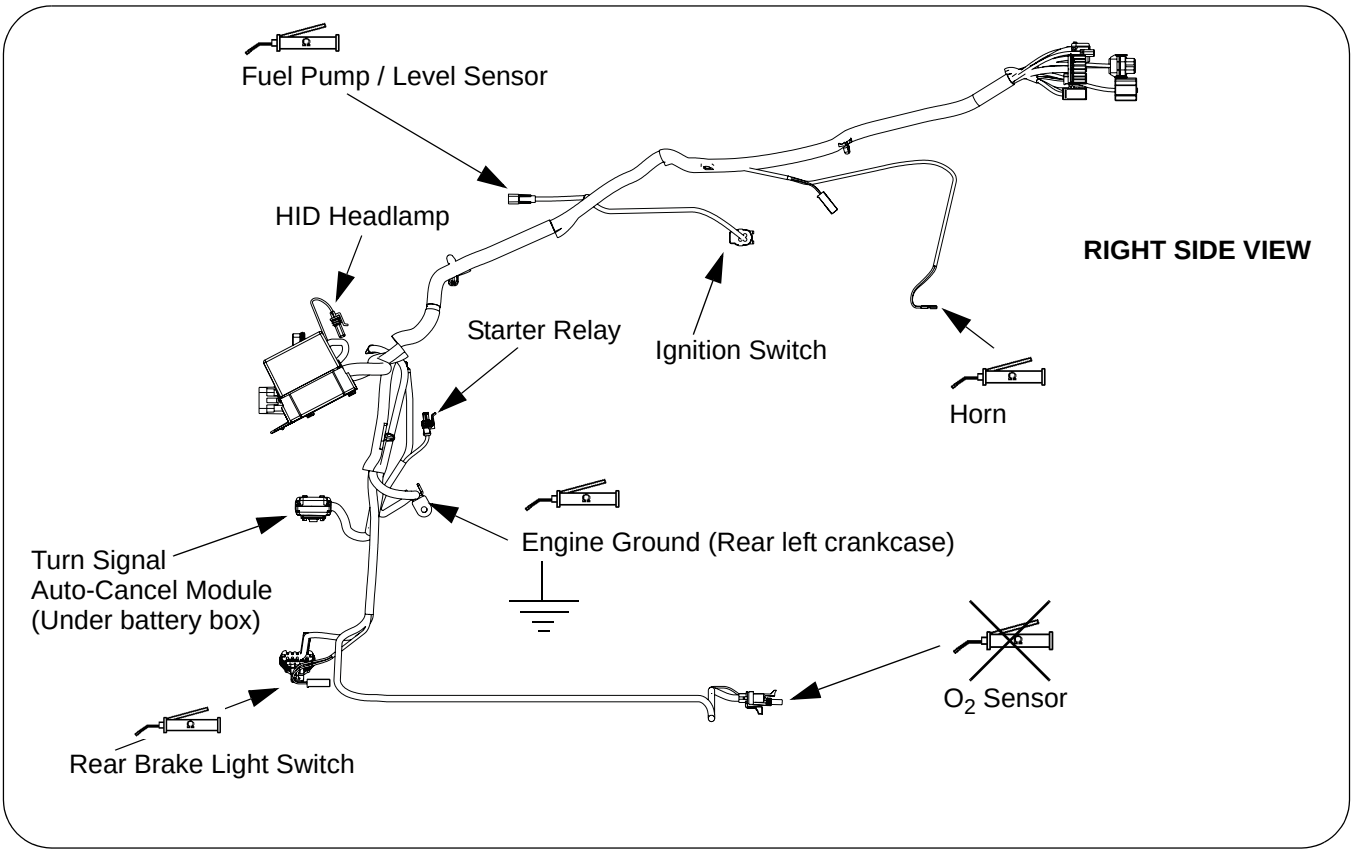
WIRE HARNESS FRONT VIEW

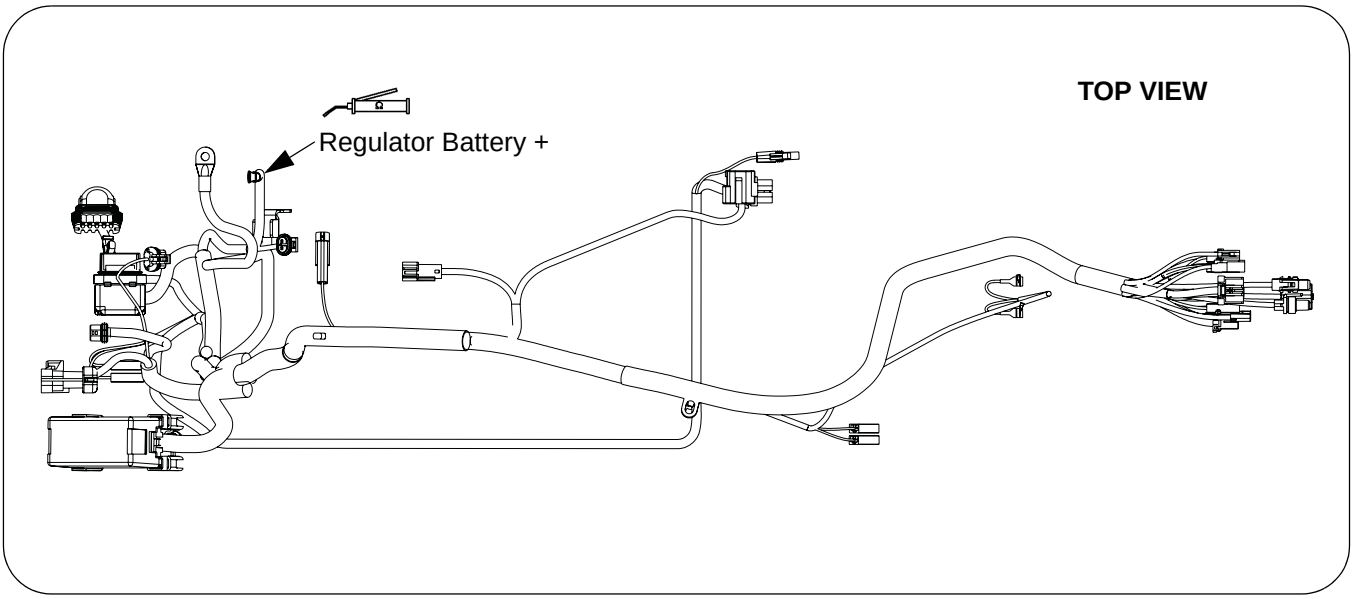


WIRE HARNESS RIGHT SIDE VIEW / TOP VIEW

NO DIELECTRIC GREASE
OR OTHER CONTAMINANTS
ALLOWED ON O_2 SENSOR WIRES
OR ENGINE HARNESS CONNECTOR

= Apply Dielectric Grease
P/N 2871329





REFERENCE

SAE TAP DRILL SIZES

Thread Size/	Drill Size	Thread Size /	Drill Size
#0-80	3/64	1/2-13	27/64
#1-64	53	1/2-20	29/64
#1-72	53	9/16-12	31/64
#2-56	51	9/16-18	33/64
#2-64	50	5/8-11	17/32
#3-48	5/64	5/8-18	37/64
#3-56	45	3/4-10	21/32
#4-40	43	3/4-16	11/16
#4-48	42	7/8-9	49/64
#5-40	38	7/8-14	13/16
#5-44	37	1-8	7/8
#6-32	36	1-12	59/64
#6-40	33	1 1/8-7	63/64
#8-32	29	1 1/8-12	1 3/64
#8-36	29	1 1/4-7	1 7/64
#10-24	24	1 1/4-12	1 11/64
#10-32	21	1 1/2-6	1 11/32
#12-24	17	1 1/2-12	1 27/64
#12-28	4.6mm	1 3/4-5	1 9/16
1/4-20	7	1 3/4-12	1 43/64
1/4-28	3	2-4 1/2	1 25/32
5/16-18	F	2-12	1 59/64
5/16-24	I	2 1/4-4 1/2	2 1/32
3/8-16	O	2 1/2-4	2 1/4
3/8-24	Q	2 3/4-4	2 1/2
7/16-14	U	3-4	2 3/4
7/16-20	25/64		

METRIC TAP DRILL SIZES

Tap Size	Drill Size	Decimal Equivalent	Nearest Fraction
3x.50	#39	0.0995	3/32
3x.60	3/32	0.0937	3/32
4x.70	#30	0.1285	1/8
4x.75	1/8	0.125	1/8
5x.80	#19	0.166	11/64
5x.90	#20	0.161	5/32
6x1.00	#9	0.196	13/64
7x1.00	16/64	0.234	15/64
8x1.00	J	0.277	9/32
8x1.25	17/64	0.265	17/64
9x1.00	5/16	0.3125	5/16
9x1.25	5/16	0.3125	5/16
10x1.25	11/32	0.3437	11/32
10x1.50	R	0.339	11/32
11x1.50	3/8	0.375	3/8
12x1.50	13/32	0.406	13/32
12x1.75	13/32	0.406	13/32

DECIMAL EQUIVALENTS

1/64	.0156	
1/32	.0312	. . 1 mm= .0394"
3/64	.0469	
1/16	.0625	
5/64	.0781	. . 2 mm = .0787"
3/32	.0938	
7/64	.1094	. . 3 mm =.1181"
1/8 1250		
9/64	.1406	
5/32	.1563	. . 4 mm = .1575"
11/64	.1719	
3/16	.1875	. . 5mm= .1969"
13/64	.2031	
7/32	.2188	
15/64	.2344	. . 6 mm = .2362"
1/4 25		
17/64	.2656	. . 7 mm = .2756"
9/32	.2813	
19/64	.2969	
5/16	.3125	. . 8mm= .3150"
21/64	.3281	
11/32	.3438	. . 9 mm = .3543"
23/64	.3594	
3/8 375		
25/64	.3906	. . 10 mm = .3937"
13/32	.4063	
27/64	.4219	. . 11 mm =.4331"
7/16	.4375	
29/64	.4531	
15/32	.4688	. . 12 mm = .4724"
31/64	.4844	
1/2 . . . . . .5. . . .	. . . . . 13mm = .5118"	
33/64	.5156	
17/32	.5313	
35/64	.5469	. . 14 mm = .5512"
9/16	.5625	
37/64	.5781	. . 15 mm = .5906"
19/32	.5938	
39/64	.6094	
5/8 . . . . . .625. .	. . . . . 16mm=. 6299"	
41/64	.6406	
21/32	.6563	. . 17 mm =.6693"
43/64	.6719	
11/16	.6875	
45/64	.7031	. . 18 mm = .7087"
23/32	.7188	
47/64	.7344	. . 19 mm = .7480"
3/4 75		
49/64	.7656	
25/32	.7813	. . 20 mm = .7874"
51/64	.7969	
13/16	.8125	. . 21 mm =.8268"
53/64	.8281	
27/32	.8438	
55/64	.8594	. . 22 mm = .8661"
7/8 875		
57/64	.8906	. . 23 mm = .9055"
29/32	.9063	
59/64	.9219	
15/16	.9375	. . 24 mm = .9449"
61/64	.9531	
31/32	.9688	. . 25 mm = .9843"
63/64	.9844	
1. . . . . 1.0		

FAHRENHEIT TO CELSIUS

^{o}C to ^{o}F: 9 (^{o}C + 40) ÷ 5 - 40 = ^{o}F

^{o}F to ^{o}C: 5 (^{o}F + 40) ÷ 9 - 40=^{o}C

DEGREES F	DEGREES C
32	**0**
41	**5**
50	**10**
59	**15**
68	**20**
77	**25**
86	**30**
95	**35**
104	**40**
113	**45**
122	**50**
131	**55**
140	**60**
149	**65**
158	**70**
167	**75**
176	**80**
185	**85**
194	**90**
203	**95**
212	**100**

MEASUREMENT CONVERSION CHART

UNIT OF MEASURE	MULTIPLIED BY	CONVERTS TO
ft-lb	x 12	= in-lb
in-lb	x.0833	= ft-lb
ft-lb	x 1.356	= Nm
in-lb	x.0115	= kg-m
Nm	x.7376	= ft-lb
kg-m	x 7.233	= ft-lb
kg-m	x 86.796	= in-lb
kg-m	x 10	= Nm
in	x 25.4	= mm
mm	x.03937	= in
in	x 2.54	= cm
mile	x 1.6	= km
km	x.6214	= mile
Ounces (oz)	x 28.35	= grams (g)
grams (g)	x.035	= Ounces (oz)
cc's	x.03381	= Fluid Ounces (oz)
lbs	x.454	= kg
kg	x 2.2046	= lbs
Cubic Inches	x 16.387	= Cubic Centimeters
Cubic Centimeters	x.061	= Cubic Inches
Imperial pints	x.568	= liters (l)
liters (l)	x 1.76	= Imperial pints
Imperial quarts	x 1.137	= liters (l)
liters (l)	x.88	= Imperial quarts
Imperial quarts	x 1.201	= US quarts
US quarts	x.833	= Imperial quarts
US quarts	x.946	= liters
liters	x 1.057	= US quarts
US gallon	x 3.785	= liter
liter	x.264	= US gallon
Pounds force per square inch (psi)	x 6.895	= Kilo pascals (kPa)
Kilo pascals (kPa)	x.145	= Pounds force per square inch (psi)

NOTES

CHAPTER 2
MAINTENANCE

SERVICE SPECIFICATIONS 2.3
TUNE UP 2.3
OIL CHANGE 2.3
FASTENER TORQUE SPECIFICATIONS 2.4
MAINTENANCE ITEMS 2.4
SPECIAL TOOLS 2.4
MAINTENANCE TOOLS 2.4
MAINTENANCE PRODUCTS 2.5
LUBRICANTS / CHEMICALS 2.5
PERIODIC MAINTENANCE 2.6
PERIODIC MAINTENANCE INTERVAL TABLE 2.6
AIR FILTER 2.7
ENGINE OIL LEVEL 2.7
ENGINE OIL & FILTER CHANGE 2.8
TIRES 2.9
CABLE INSPECTION / LUBRICATION 2.10
THROTTLE FREE PLAY ADJUSTMENT 2.10
FRONT BRAKE LEVER LUBRICATION 2.11
CLUTCH LEVER LUBRICATION (CABLE) 2.11
HYDRAULIC CLUTCH LEVER LUBRICATION 2.11
CLUTCH LEVER FREE PLAY (CABLE) 2.12
FRONT BRAKE LEVER INSPECTION 2.12
FRONT BRAKE LEVER REACH 2.12
BRAKE PEDAL PIVOT LUBRICATION (FOOTPEGS) 2.13
BRAKE PEDAL FREE PLAY INSPECTION / ADJUSTMENT 2.13
SHIFT PEDAL PIVOT LUBRICATION (FOOTPEG MODELS) 2.14
GEAR SHIFT PEDAL ADJUSTMENT 2.15
SHIFT PEDAL & BRAKE PEDAL PIVOT LUBRICATION (FLOORBOARD MODELS) . 2.16
BRAKE / CLUTCH FLUID LEVEL INSPECTION 2.17
FRONT BRAKE PAD INSPECTION 2.18
REAR BRAKE PAD INSPECTION 2.18
CRANKCASE VENTILATION SYSTEM 2.19
EVAPORATIVE EMISSION CONTROL SYSTEM (CALIFORNIA MODELS) 2.19
FUEL PRE-FILTER INSPECTION 2.19
FUEL SYSTEM INSPECTION 2.20
FUEL TANK VENT INSPECTION (49 STATE) 2.20
SPARK PLUG REMOVAL & INSPECTION 2.21
SPARK PLUG INSTALLATION 2.21
BATTERY 2.22
BATTERY CHARGING 2.22
BATTERY STORAGE 2.22
BATTERY INSPECTION 2.22
BATTERY REMOVAL 2.23
BATTERY INSTALLATION 2.23
ENGINE COMPRESSION TEST 2.24
ENGINE COMPRESSION TEST (WET) 2.24
SPROCKET INSPECTION 2.24
DRIVE BELT INSPECTION 2.25
DRIVE BELT TENSION - INSPECTION 2.26
DRIVE BELT ADJUSTMENT / ALIGNMENT 2.27
FUSE REPLACEMENT 2.28
(CONT.)

PERIODIC MAINTENANCE (CONT.)

HEADLIGHT AIM INSPECTION 2.28
HEADLAMP AIM ADJUSTMENT 2.29
SIDESTAND INSPECTION 2.29
SIDESTAND & SPRING REMOVAL 2.30
SIDESTAND PAD INSPECTION 2.30
SIDESTAND PAD REPLACEMENT 2.31
REAR SUSPENSION / SWINGARM INSPECTION 2.32
RIDE HEIGHT MEASUREMENT (SHOCK SPRING PRE-LOAD) 2.33
RIDE HEIGHT ADJUSTMENT 2.35
FASTENERS 2.35
FRONT SUSPENSION INSPECTION 2.36
STEERING HEAD / FRONT WHEEL INSPECTION 2.36
CLEANING 2.37
WAXING, POLISHING, APPLYING PROTECTANTS 2.37
STORAGE 2.38

SERVICE SPECIFICATIONS

TUNE UP

ITEM		SPECIFICATION
Specifications apply to Vegas and Kingpin models except Vegas Low where noted		
Brake Pedal Freeplay (Gap at pedal stop)		Footpegs: (page 2.13): 2-5mm (.080-.200") Floorboards: (page 2.16) 1-2mm (.040-.080")
Clutch Lever Freeplay		.5 - 1.5mm (.020-.060")
Compression Pressure (Cylinder)		185-225 (1275-1551)
Drive Belt Deflection (See page 2.25)	Vegas / KP	12 mm (15/32") with 10 lb force +/- 1.0 mm (+/- 1/32)
	Vegas Low	6 mm (15/64") with 10 lb force +/- .5mm (+/- 1/64)
Drive Belt Frequency (Using Sonic Tension Meter) (See page 2.25 for required data)	Vegas / KP	Frequency: New Belt & Sprockets = 36 Hz +/- 1 Hz **After 500 miles = 32 Hz +/- 1 Hz**
	Vegas Low	Frequency: New Belt & Sprockets = 50.6 Hz +/- 1 Hz **After 500 miles = 48 Hz +/- 1 Hz**
Fast Idle Speed		Not Adjustable (Set by PCM / IAC valve)
Fuel Type / Octane		Premium Unleaded / 92 Octane Minimum (see page 5.4)
Oil Pressure, Lubrication @ 3000 rpm		552 kPa (80 psi) (Minimum 40 psi)
Oil Pressure, Cooling @ 3000 rpm		(See special notes page 4.8)
Ride Height (Rear Shock Spring Pre-Load)		See page 2.33
Spark Plug Type / Gap		NGK DCPR6E / .8 - .9 mm (.032 - .036")
Throttle Cable Freeplay		2 - 4 mm (5/64" - 5/32")
Tire Pressure		Refer to chart (page 2.9) or decal under LH side cover

OIL CHANGE

Start the engine and warm it up for several minutes. While warming up, check for oil leaks. If any leaks are found, stop the engine immediately and determine the source of the problem before starting the engine again.

NOTE: After the engine is started, the oil indicator light should go off. If the indicator light flickers or remains on, immediately stop the engine and diagnose the problem before continuing.

TIGHTENING TORQUE	
Drain Plug (Inspect / replace sealing washer)	20 Nm (15 ft. lbs.)
Oil Filter	3/4 full turn after contacting the sealing surface

OIL TYPE / QUANTITY	
Oil Type	Victory Semi-Synthetic 20W40 Engine Oil
Oil Capacity (Oil & Filter Change)	Approximately 4.25 liters (4.5 quarts)
Oil Capacity (Dry)	Approximately 4.75 liters (5.0 quarts)

Use Victory 20W40 Synthetic Blend 20W40 engine oil for all temperatures. If Victory oil is not available, use a high quality 20W40 motorcycle designed for use with wet clutches (such as those with a JASO MA rating).

NOTICE
Do not put chemical additives in the oil. Victory motorcycle oil has been specially designed for this application. Additional additives are not necessary and have not been approved by Victory Engineering.

FASTENER TORQUE SPECIFICATIONS

MAINTENANCE ITEMS

DESCRIPTION	TORQUE		APPLY / NOTES
	N-m	Lb-ft (Lb-in)	
Air Filter Cover	-	(10)	
Axle Nut, Rear	88	65	
Axle Adjuster Lock Nut, Rear (Lock nut style adjusters only)	-	-	Tighten securely after axle is tightened
Battery Terminal Bolts & Battery Cover Nuts	4.5	(40)	Dielectric Grease
Battery Cable To Solenoid or Starter Motor	6.8	(60)	Dielectric Grease
Brake Lever Pivot Screw and Nut (Front)	6	(9)	
Brake Lever Pivot Screw and Nut (Front)	1	(52)	
Clutch Lever Pivot Nut	6	(52)	
Drive Sprocket Nut	244	180	Loctite™ 262
Drive Sprocket Nut Retainer Plate Screws	10	(85)	
Exhaust / Muffler	Refer to Chapter 3		
Foot Peg Assembly to Frame	47.5	35	
Foot Peg Feeler	9.5	(84)	
Fuel Tank Mounting Screws	47.5	35	
Oil Drain Plug	20	15	12x1.5mm
Oil Filter	3/4 Turn Past Gasket Contact		
Seat	24.5	18	
Side Stand Pivot Bolt & Nut	47.5	35	
Spark Plug (New)	11	8.5	Anti-seize compound
Swingarm Pivot Shaft	88	65	
Strut Covers (on rear fender)	24.5	18	
Switch Cube Screws (L & R Handlebar Switch)	3	(25)	Tighten Top Screw First

SPECIAL TOOLS

MAINTENANCE TOOLS

- Belt Tension Gauge PV-43532 (Sonic Tension Meter is optional and commercially available)
- Spanner Wrench - PV-46993
- Compression Gauge Set PV-33223

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